Version: 2021-11-19

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

The All-In-One Cabinet Solution for your BACS®Control Center

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

Overview: BACS® CONTROL CABINETS: Technical data and dimensions

Control cabinet for BACS® systems. Plug-play, with AC input plug (Euro) ready to install. With optical and audible display on the outside door, protection class IP 54 with application of included bottom plate.

			**BACS® CONTROL CABINET Type 1** Order No. BACS_CC1
	Controller	1	BACS WEBMANAGER BUDGET
	Power	1	12V Power supply (100 – 240V, 50/60Hz)
	LAN	1	CAT 6 Ethernet socket
	Contacts	1	Alarm contact (potential-free), 230VC / 30VDC / 8A
	Front door	1	POWER LED
	Front door	1	BACS ALARM LED
	Spare parts	6	Spare bus communication cable
	Dimension	WHD	400 x 500 x 210 mm = 15,75 x 19,69 x 8,27 in.
	weight	kg	16,10
			**BACS® CONTROL CABINET Type 2** Order No. BACS_CC2
	Controller	2	BACS WEBMANAGER BUDGET
	Power	2	12V Power supply (100 – 240V, 50/60Hz)
	LAN	2	CAT 6 Ethernet socket
	Contacts	2	Alarm contact (potential-free), 230VC / 30VDC / 8A
	Front door	2	POWER LED
	Front door	2	BACS ALARM LED
	Spare parts	8	spare bus communication cable
	Dimension	WHD	500 x 500 x 210 mm = 19,69 x 19,69 x 8,27 in.
	weight	kg	20,20
			**BACS® CONTROL CABINET Type 3** Order No. BACS_CC3
	Controller	3	BACS WEBMANAGER BUDGET
	Power	3	12V Power supply (100 – 240V, 50/60Hz)
	LAN	3	CAT 6 Ethernet socket
	Contacts	3	Alarm contact (potential-free), 230VC / 30VDC / 8A
	Front door	3	POWER LED
	Front door	3	BACS ALARM LED
	Spare parts	10	Spare bus communication cable
	Dimension	WHD	500 x 500 x 210 mm = 19,69 x 19,69 x 8,27 inch
	weight	kg	22,70

BACS Plus Size BACS Control Cabinets are also available as:

BACS® CONTROL CABINET Type 4 Order No. BACS_CC4	**BACS® CONTROL CABINET Type 5** Order No. BACS_CC5	**BACS® CONTROL CABINET Type 6** Order No. BACS_CC6
- 4 * BACS WEBMANAGER BUDGET	- 5 * BACS WEBMANAGER BUDGET	- 6 * BACS WEBMANAGER BUDGET
- 4 * 12V Power 100 – 240V, 50/60Hz	- 5 * 12V Power 100 – 240V, 50/60Hz	- 6 * 12V Power 100 – 240V, 50/60Hz
- 4 * CAT 6 Ethernet socket	- 5 * CAT 6 Ethernet socket	- 6 * CAT 6 Ethernet socket
- 4 * Alarm contact (potential-free) 230VC, 30VDC, 8A	- 5 * Alarm contact (potential-free) 230VC, 30VDC, 8A	- 6 * Alarm contact (potential-free) 230VC, 30VDC, 8A
- 4 * POWER LED, - 4 * BACS ALARM LED	- 5 * POWER LED, - 5 * BACS ALARM LED	- 6 * POWER LED, - 6 * BACS ALARM LED
12 * spare bus communication cable	14 * spare bus communication cable	16 * spare bus communication cable
- Dimension: 600 x 760 x 210 mm 23,62 x 29,92 x 8,27 in, weight: 38,10 kg	- Dimension: 760 x 760 x 210 mm 29,92 x 29,92 x 8,27 in weight: 48,50 kg	- Dimension: 760 x 760 x 210 mm 29,92 x 29,92 x 8,27 in weight:.55,40 kg

TEL +49(40)22692910 - EMAIL generex@generex.de - WEB www.generex.de (This and all other product datasheets are available for download.

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

Also available: BACS Control Cabinet with a full featured Windows Touch Panel All-In-One Computer*

		BACS® CONTROL CABINET with PC All Cabinets are also available with a fully featured Touch Panel Computer
 	RAM CPU Touch Panel USB COM LAN Wireless Power Consumption (max) Input voltage Graphic Software Operating Condition Relative humidity EMC Notes:	1*204-pin SODIMM DDR3L 1333MHz / up to 8GB Intel Bay Trial J1900 Quad Core 2GHz 15“ XGA TFT multi-point capacitive touch screen 4* USV 6 COMPorts 2 GLAN P 1 x Mini-PCIe slot, extensible 3G,Wifi wireless card 38,6 Watt max DC 12V, support reverse polartity protection VGA/HDMI Windows 10 Professional English Language BACS Tools Software packet pre-installed -30 ~80°C (-22~176°F) 5~95% (Non condensation) CD/FCC Class A The Operating system is a fully featured Windows 10 operating system and needs additional configuration work. not pre-configured – you need to configure it before first use.
How to order your BAC CC with Touch Panel PC:		
1 BACS WEBMANAGER + PC		BACS_CC1_TP
2 BACS WEBMANAGER + PC		BACS_CC2_TP
3 BACS WEBMANAGER + PC		BACS_CC3_TP
4 BACS WEBMANAGER + PC		BACS_CC4_TP
5 BACS WEBMANAGER + PC		BACS_CC5_TP
6 BACS WEBMANAGER + PC		BACS_CC6_TP

*for more information, contact, please contact the GENEREX sales team with sales@generex.de.

Appendix: Datasheets of the devices used for the BACS Control Cabinet:

- Touch Panel PC
- Control Cabinet
- Used devices
- Power Adapter
- Wiring diagrams

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

TPC6000-C152-T

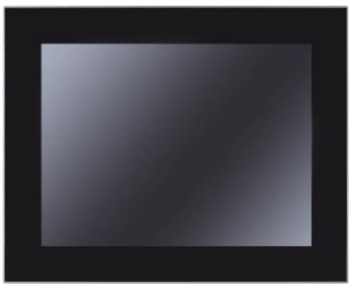
Industrial Panel PC

15 "XGA Fanless Industrial Panel PC
Intel® Celeron™Bay Trial J1900

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS



TPC6000-CI52-T

Specifications :

Processor	CPU	Intel® Bay Trial J1900
	Frequency	Quad core 2GHz
	L2 Cache	2MB
	Chipset	Intel Bay trail SOC
	Memory	1 x 204-pin SODIMM DDR3L-1333MHz support up to 8GB
	Storage Medium	1 x 2.5" SATA bay + 1 x mSATA
I/O	LAN	2 x Realteck RTL8111F 1000Mbps RJ-45 with surge protection,lightning protection design and 15KV ESD protection
	Audio	Realtek ACL662 Audio controller， built-in mono speaker(optional)
	USB	1 x USB3.0/2.0/1.1, 3 x USB2.0/1.1
	COM	1 x RS-232/485 (COM1), 5 x RS-232 (Optional 2xRS48,RS485 support automatic flow control）
	Texpansion slot	1 x Mini-PCIe slot, extensible 3G,WIFI wireless card
	Rear I/O	VGA / HDMI / 2 x GLAN / 4 x USB / 6 x COM
Physical	Dimensions (W x H x D)	393mm x 317mm x 81mm (15.47" x 12.48" x3.19")
	Drill Hole Size (W x H)	376mm x 302mm (14.80" x 11.89")
	NW	—
OS	OS	Windows 7, Windows 7, Windows8, Windows10, Ubuntu
Power	Input voltage	DC 12V,support reverse polarity protection, +9~+30V (Option)
	Maximum Power Dissipation	38.6Watt
LCD	LCD Size	15" XGA TFT
	Resolution	1024 x 768
	Colors	16.7MB
	Active Area (W x H)	304.13mm x 228.10mm (11.97" x 8.98")
	Backlight	LED
	MTBF	30000hrs
	Pixel Pitch(H x V)	0.297 x 0.297
	Luminance	420cd/m²
	Contrast Ratio	800 : 1
	Viewing Angle	(L) 80 / (R) 80 / (T) 80 / (B) 80
Touchscreen	Type	Multi-point capacitive touch screen
	Transmittance	> 75%
	Controller interface	USB

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

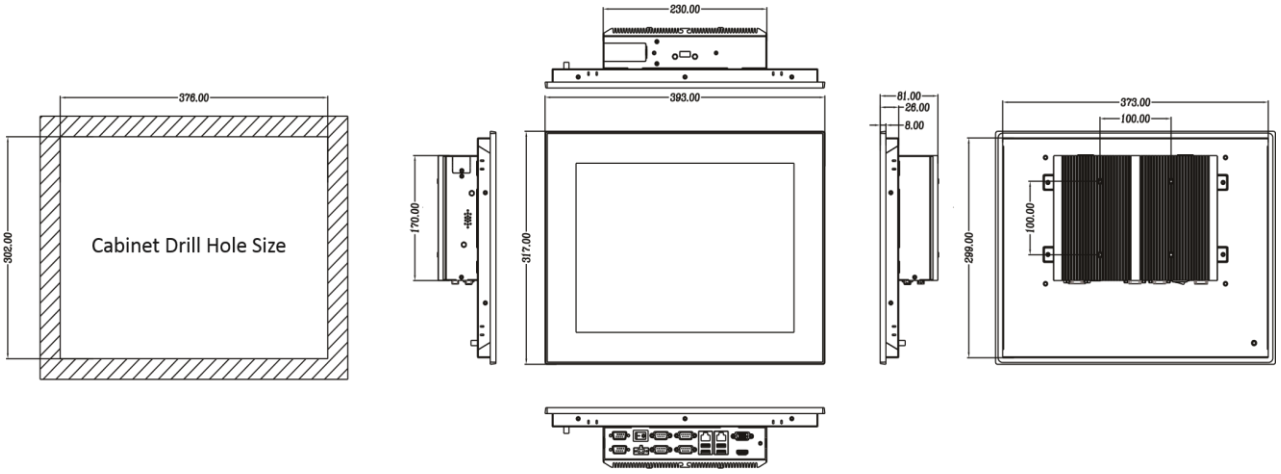
	Driver Support	Windows7, Windws 8, Windows 10, Linux
	Multi-touch	10 points (windows system)
	Surface Hardness	Mohs' Number 7
Environmental	Work Temperature	-20 ~ 60°C (-4~140 °F)(Wide temperature SSD)
		0 ~ 45°C (32~113 °F) (General temperature HDD/SSD)
	Storage Temperature	-30 ~ 80℃ (-22 ~ 176 °F)
	Relative humidity	5~95% (Non condensation)
	Shake	SSD applied: 1.5 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock	SSD applied: 10 G, IEC 60068-2-64, Half-sine wave, 11ms duration
	EMC	CE/FCC Class A
	Water-proof	Front panel IP65

Industrial Panel PC

www.nodka.com

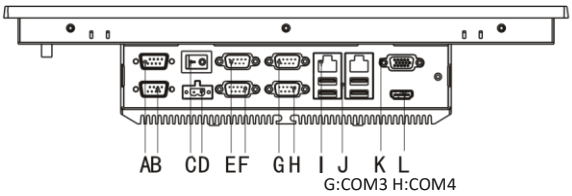
TPC6000-C152-T

Dimensions:



Unit : **mm**

I/O:



Interface Definition:

A:COM6
B:COM5
C:Power switch
D:DC IN(12V)
E:COM1

I:LAN*2
J:USB2.0*4
K:VGA

F:COM2 L:HDMI

BACS® Cabinets

BACS® - Cabinets Datasheet

All-in-One-Cabinet Solution for BACS

Ordering Information:

Product Code	Description
TPC6000-C152-T	15"LCD/Intel® Celeron™ Bay Trail J1900 quad-core Processor(2.0 GHz)/No Memory/No Hard Disk/6*RS-232(Optional 1*RS-232 or 485)/2 Gigabit Ethernet ports/4*USB2.0/Capacitive touch screen/1024*768/DC12V input/Two-year warranty

Optional Equipment:

Option	Adapter 12V/60W 2 pin Phoenix terminal
Option	Chinese standard Power Line 1.8m
Standard	4*Hooks
Standard	Manufacturer Certificate
Standard	Warranty Card
Standard	Random Listing

Industrial Panel PC

Rittal – The System.

Faster – better – everywhere.

COMPACT ENCLOSURES AX

Technical details

ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

Contents

Compact enclosures AX, sheet steel

Basic enclosure AX

Model No. AX	Width mm	Height mm	Depth mm	Cam lock	3-point locking system	Page
1031.000	380	300	210	1	–	4 – 5
1033.000	300	300	210	1	–	4 – 5
1034.000	300	400	210	1	–	4 – 5
1037.000	400	800	300	2	–	4 – 5
1038.000	380	600	210	2	–	4 – 5
1039.000	600	380	210	1	–	4 – 5
1045.000	400	500	210	2	–	4 – 5
1050.000	500	500	210	2	–	4 – 5
1054.000	600	600	250	2	–	4 – 5
1055.000	800	600	300	2	–	6 – 7
1057.000	500	700	250	2	–	4 – 5
1058.000	600	800	250	2	–	4 – 5
1059.000	600	800	400	2	–	4 – 5
1060.000	600	600	210	2	–	4 – 5
1073.000	760	760	300	2	–	6 – 7
1076.000	600	760	210	2	–	4 – 5
1077.000	760	760	210	2	–	6 – 7
1090.000	600	1000	250	2	–	4 – 5
1091.000	600	1000	400	2	–	4 – 5
1100.000	1000	760	210	2	–	12 – 13
1110.000	1000	1000	300	2	–	12 – 13
1114.000	1000	1,400	300	–	■	14 – 15
1115.000	1000	1,400	400	–	■	14 – 15
1116.000	1200	1200	400	–	■	14 – 15
1130.000	1000	760	300	2	–	12 – 13
1180.000	800	1000	300	2	–	6 – 7
1181.000	800	1000	400	2	–	6 – 7
1213.000	1000	1200	300	–	■	14 – 15
1214.000	1000	1200	400	–	■	14 – 15
1260.000	600	1200	300	–	■	8 – 9
1261.000	600	1200	400	–	■	8 – 9
1280.000	800	1200	300	–	■	10 – 11
1281.000	800	1200	400	–	■	10 – 11
1338.000	380	600	350	2	–	4 – 5
1339.000	600	380	350	1	–	4 – 5
1350.000	500	500	300	2	–	4 – 5
1360.000	600	600	350	2	–	4 – 5
1376.000	600	760	350	2	–	4 – 5
1380.000	380	380	210	1	–	4 – 5

Wall-mounted enclosure AX IT with 482.6 mm (19") mounting angles

Model No. AX	Width mm	Height mm	Depth mm	Page
7641.350	600	380	350	20
7643.350	600	600	350	20
7645.350	600	760	350	20
7646.400	600	800	400	20

Command panel AX with handle strips

Model No. AX	Width mm	Height mm	Depth mm	Page
6315.150	300	300	210	21
6315.250	380	300	210	21
6315.350	380	380	210	21
6315.450	500	500	210	21
6315.650	600	600	210	21
6320.050	300	200	155	22
6320.350	380	380	210	22
6320.450	500	500	210	22
6320.550	600	380	210	22
6320.650	600	600	210	22

Command panel AX for desktop TFT up to 24"

Model No. AX	Width mm	Height mm	Depth mm	Page
6321.050	650	450	155	23

Compact enclosures AX, stainless steel

Basic enclosure AX

Model No. AX	Width mm	Height mm	Depth mm	Cam lock	3-point locking system	Page
1003.000	300	300	210	1	–	16 – 17
1005.000	300	380	210	1	–	16 – 17
1006.000	380	380	210	1	–	16 – 17
1007.000	500	500	210	2	–	16 – 17
1008.000	380	600	210	2	–	16 – 17
1009.000	600	380	210	1	–	16 – 17
1010.000	600	600	210	2	–	16 – 17
1011.000	380	300	210	1	–	16 – 17
1012.000	600	760	210	2	–	16 – 17
1013.000	500	500	300	2	–	16 – 17

Model No. AX	Width mm	Height mm	Depth mm	Cam lock	3-point locking system	Page
1014.000	760	760	300	2	–	16 – 17
1015.000	400	500	210	2	–	16 – 17
1016.000	800	1000	300	2	–	16 – 17
1017.000	800	1200	300	–	■	18
1018.000	1000	1000	300	2	–	19
1019.000	1000	1200	300	–	■	19
1302.000	300	380	210	1	–	16 – 17
1303.000	380	380	210	1	–	16 – 17
1304.000	600	600	210	2	–	16 – 17
1305.000	1000	1200	300	–	■	19


RITTAL
B1
B10
A

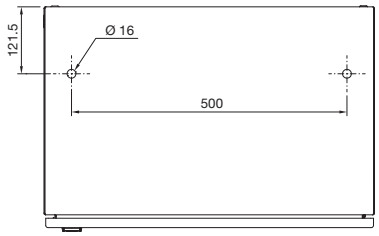
Compact enclosures AX, sheet steel

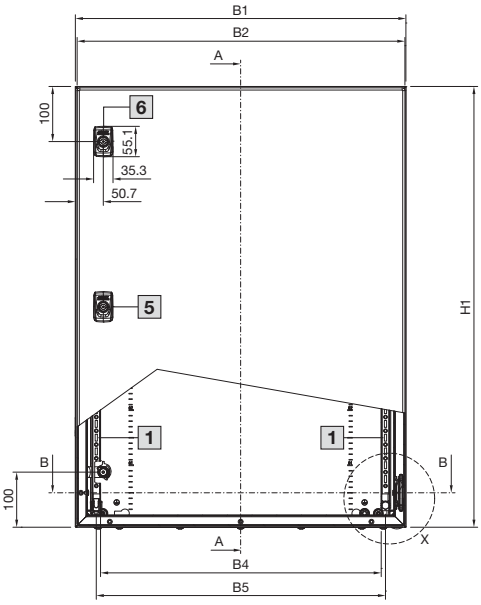
Basic enclosure AX

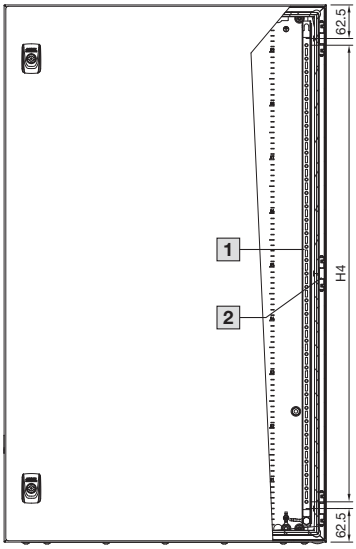
with cam lock and one gland plate

1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm
4 Not applicable to B1 = 300 mm
5 One central cam where H1 ≤ 400 mm
6 Two cams where H1 > 400 mm

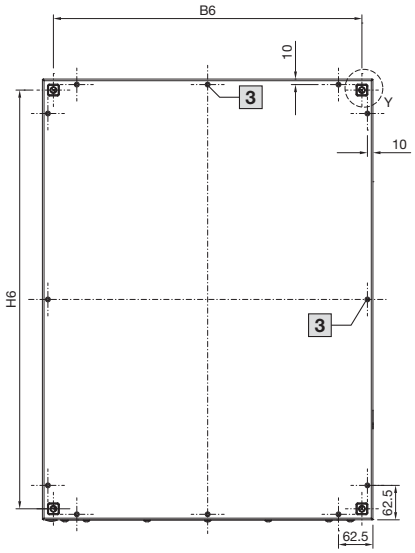
Drilled holes for eyebolts
(only for 1059.000/1091.000)



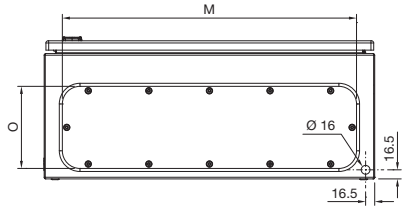


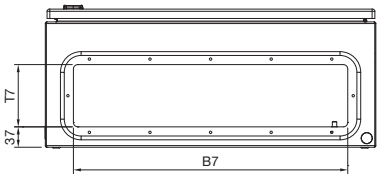


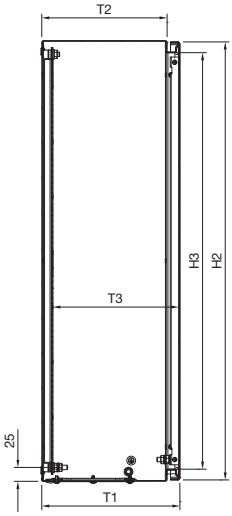
Section A – A

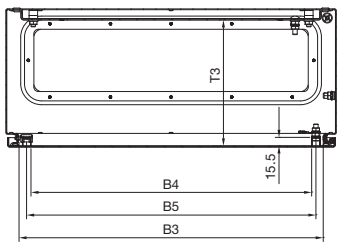


Section B – B

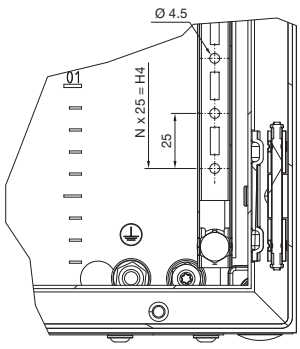




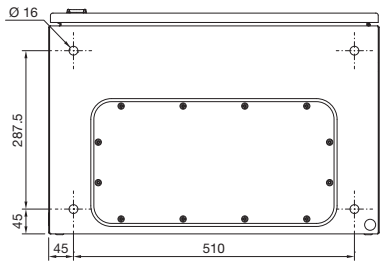




Detail X



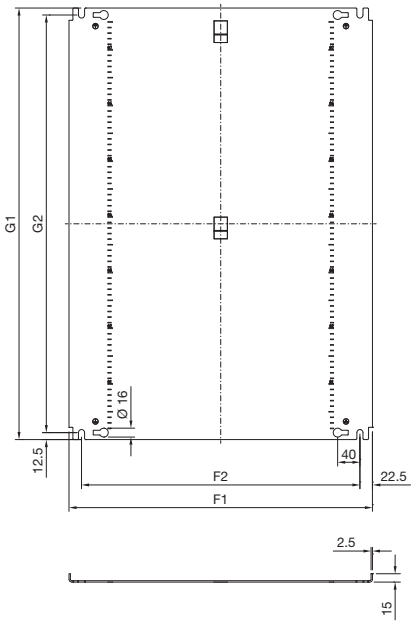
Drilled holes for base/plinth
(only for 1059.000/1091.000)



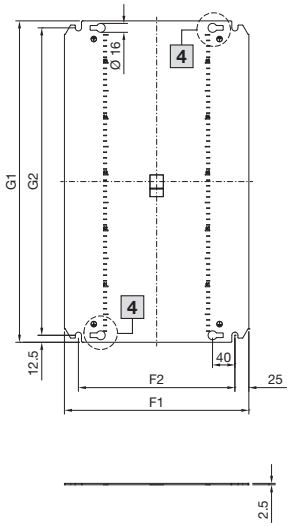
Basic enclosure AX

with cam lock and one gland plate

Mounting plate type 1,
with edge fold



Mounting plate type 2,
without edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips
B5 = Mounting distance, door profile strips
B6 = Mounting distance, enclosures
B7 = Gland plate opening

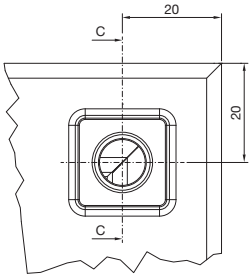
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H6 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T7 = Gland plate opening

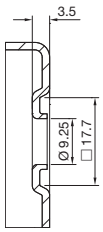
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

Detail Y



Section C – C



Model No. AX	Width dimensions mm							Height dimensions mm						Depth dimensions mm				Mounting plate mm					Gland plate mm		
	B1	B2	B3	B4	B5	B6	B7	H1	H2	H3	H4	H6	N	T1	T2	T3	T7	F1	F2	G1	G2	Type	M	O	Type
1031.000	380	374	332.7	289.5	305	340	303	300	294	256.5	150	260	6	209.7	187.0	189.0	113	330	280	275	250	2	339	149	2
1033.000	300	294	252.7	209.5	225	260	220	300	294	256.5	150	260	6	209.7	187.0	189.0	113	250	200	275	250	2	256	149	1
1034.000	300	294	252.7	209.5	225	260	220	400	394	356.5	250	360	10	209.7	187.0	189.0	113	250	200	375	350	2	256	149	1
1037.000	400	395	352.2	309.5	325	360	265	800	795	756	650	760	26	300.7	277.5	278.7	185	345	300	775	750	1	301	221	5
1038.000	380	374	332.7	289.5	305	340	303	600	594	556.5	450	560	18	209.7	187.0	188.5	113	330	280	575	550	2	339	149	2
1039.000	600	594	552.7	509.5	525	560	498	380	374	336.5	250	340	10	209.7	187.0	188.5	113	550	500	355	330	2	534	149	4
1045.000	400	394	352.7	309.5	325	360	303	500	494	456.5	350	460	14	209.7	187.0	189.0	113	350	300	475	450	2	339	149	2
1050.000	500	494	452.7	409.5	425	460	411	500	494	456.5	350	460	14	209.7	187.0	188.5	113	450	400	475	450	2	447	149	3
1054.000	600	594	552.2	509.5	525	560	498	600	594	556	450	560	18	250.2	227.5	228.7	113	550	500	575	550	2	534	149	4
1057.000	500	495	452.2	409.5	425	460	411	700	695	656	550	660	22	250.7	227.5	228.7	113	450	400	675	650	2	447	149	3
1058.000	600	595	552.2	509.5	525	560	498	800	795	756	650	760	26	250.7	227.5	228.7	113	545	500	775	750	1	534	149	4
1059.000	600	595	552.2	509.5	525	560	400	800	795	756	650	760	26	400.7	377.5	378.7	185	545	500	775	750	1	436	221	7
1060.000	600	594	552.2	509.5	525	560	498	600	594	556	450	560	18	210.2	187.5	188.7	113	550	500	575	550	2	534	149	4
1076.000	600	595	552.2	509.5	525	560	498	760	755	716	600	720	24	210.7	187.5	188.7	113	550	500	735	710	2	534	149	4
1090.000	600	595	552.2	509.5	525	560	498	1000	995	956	850	960	34	250.7	227.5	228.7	113	545	500	975	950	1	534	149	4
1091.000	600	595	552.2	509.5	525	560	400	1000	995	956	850	960	34	400.7	377.5	378.7	185	545	500	975	950	1	436	221	7
1338.000	380	374	332.2	289.5	305	340	265	600	594	556.5	450	560	18	350.2	327.5	328.7	185	330	280	575	550	2	301	221	5
1339.000	600	594	552.2	509.5	525	560	400	380	374	336	250	340	10	350.2	327.5	328.7	185	550	500	355	330	2	436	221	7
1350.000	500	494	452.2	409.5	425	460	365	500	494	456	350	460	14	300.2	277.5	278.7	185	450	400	475	450	2	401	221	6
1360.000	600	594	552.2	509.5	525	560	400	600	594	556	450	560	18	350.2	327.5	328.7	185	550	500	575	550	2	436	221	7
1376.000	600	595	552.2	509.5	525	560	400	760	755	716	600	720	24	350.7	327.5	328.7	185	550	500	735	710	2	436	221	7
1380.000	380	374	332.7	289.5	305	340	303	380	374	336.5	250	340	10	209.7	187.0	189.0	113	330	280	355	330	2	339	149	2

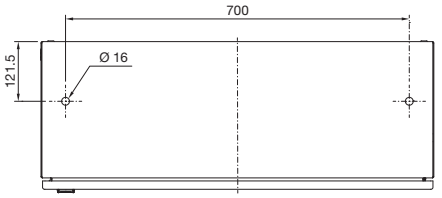
Compact enclosures AX, sheet steel

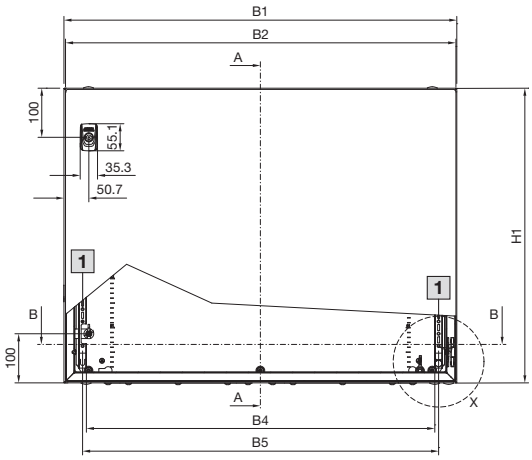
Basic enclosure AX

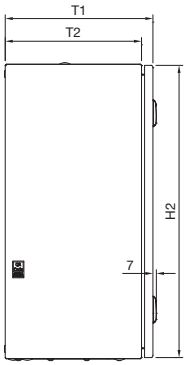
with cam lock and two gland plates

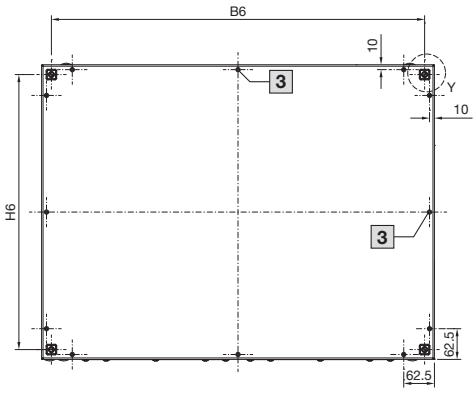
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm
4 Not applicable to B1 = 300 mm

Drilled holes for eyebolts
(only for 1055.000/1180.000/1181.000)

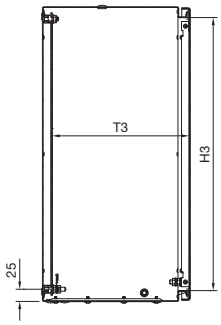




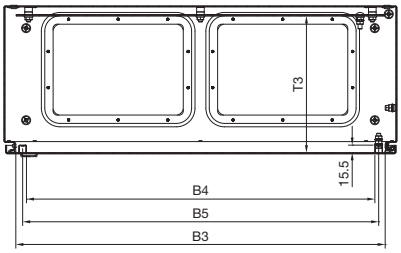


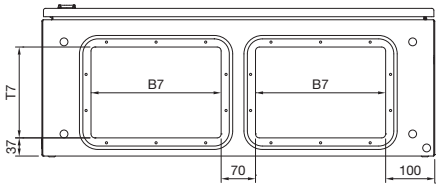


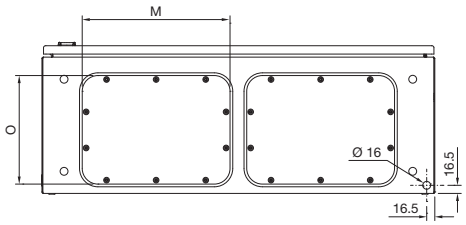
Section A – A

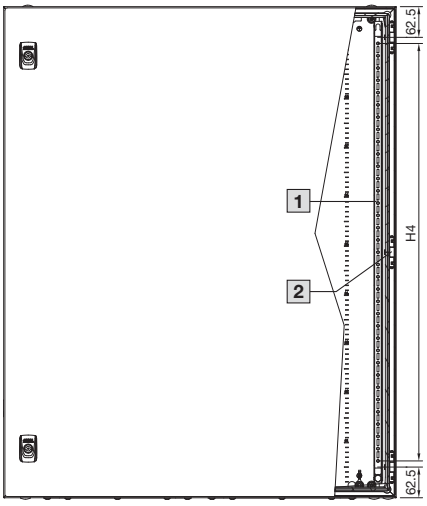


Section B – B

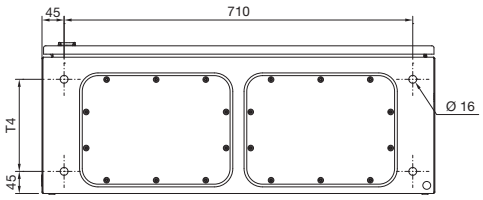








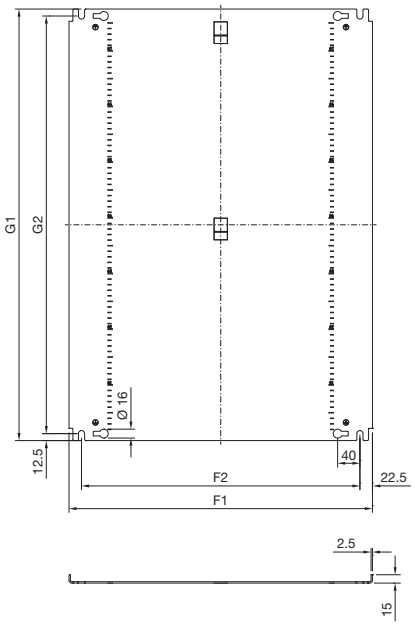
Drilled holes for base/plinth
(only for 1055.000/1180.000/1181.000)



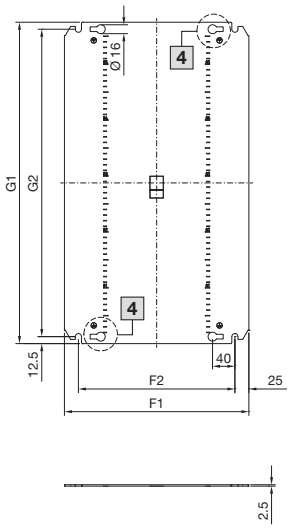
Basic enclosure AX

with cam lock and two gland plates

Mounting plate type 1,
with edge fold



Mounting plate type 2,
without edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips
B5 = Mounting distance, door profile strips
B6 = Mounting distance, enclosures
B7 = Gland plate opening

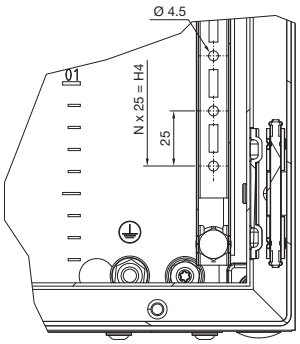
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H5 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T4 = Spacing between holes for base/plinth
T7 = Gland plate opening

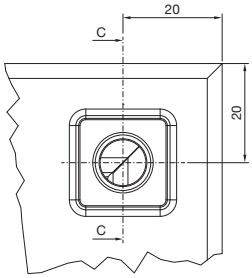
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

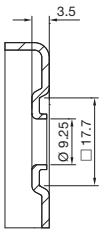
Detail X



Detail Y



Section C – C



Model No. AX	Width dimensions mm							Height dimensions mm						Depth dimensions mm					Mounting plate mm					Gland plate mm		
	B1	B2	B3	B4	B5	B6	B7	H1	H2	H3	H4	H6	N	T1	T2	T3	T4	T7	F1	F2	G1	G2	Type	M	O	Type
1055.000	800	795	752.2	709.5	725	760	265	600	595	556	450	560	18	300.7	277.5	278.7	187.5	185	750	700	575	550	2	301	221	5
1073.000	760	755	712.2	669.5	685	720	265	760	755	716	600	720	24	300.7	277.5	278.7	–	185	705	660	735	710	1	301	221	5
1077.000	760	755	712.2	669.5	685	720	303	760	755	716	600	720	24	210.7	187.5	188.7	–	113	705	660	735	710	1	339	149	2
1180.000	800	795	752.2	709.5	725	760	265	1000	995	956	850	960	34	300.7	277.5	278.7	187.5	185	745	700	975	950	1	301	221	5
1181.000	800	795	752.2	709.5	725	760	265	1000	995	956	850	960	34	400.7	377.5	378.7	287.5	185	745	700	975	950	1	301	221	5

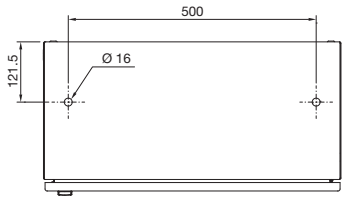
Compact enclosures AX, sheet steel

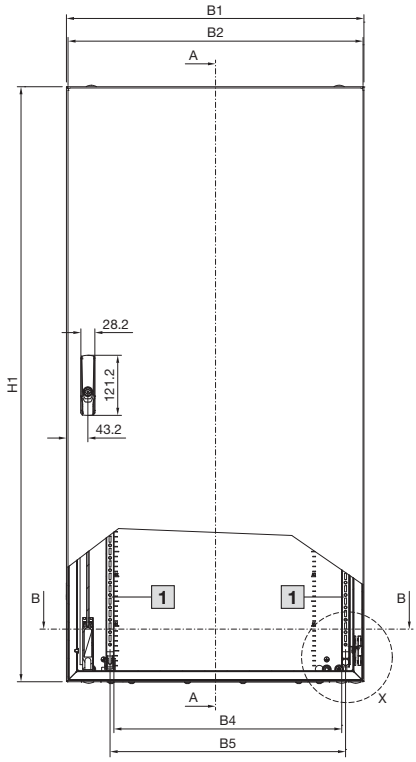
Basic enclosure AX

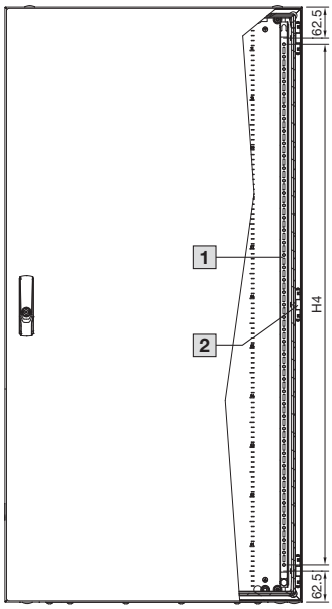
with 3-point locking system and one gland plate

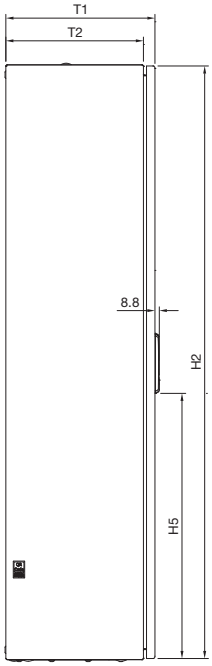
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Drilled holes for eyebolts

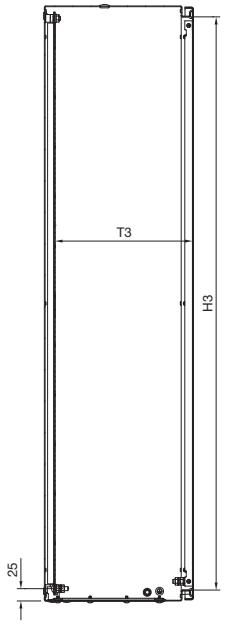


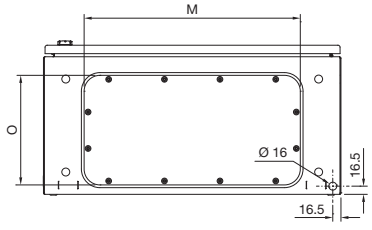


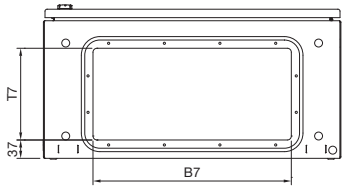




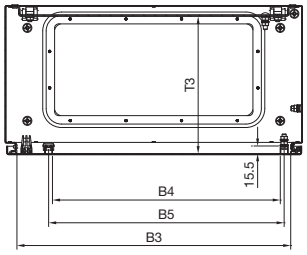
Section A – A



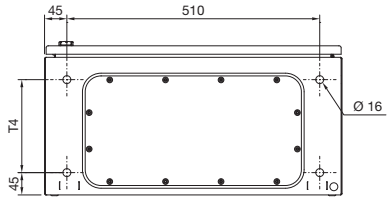




Section B – B

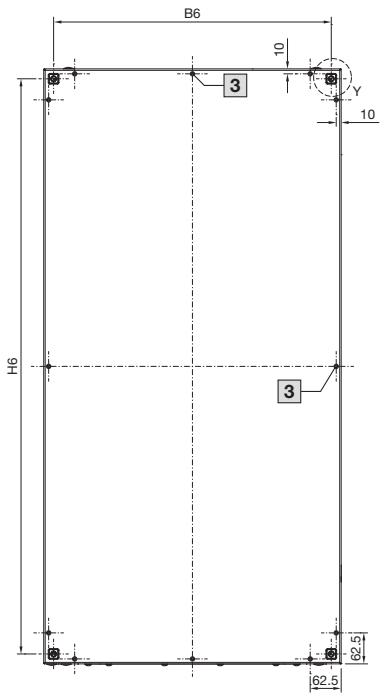


Drilled holes for base/plinth

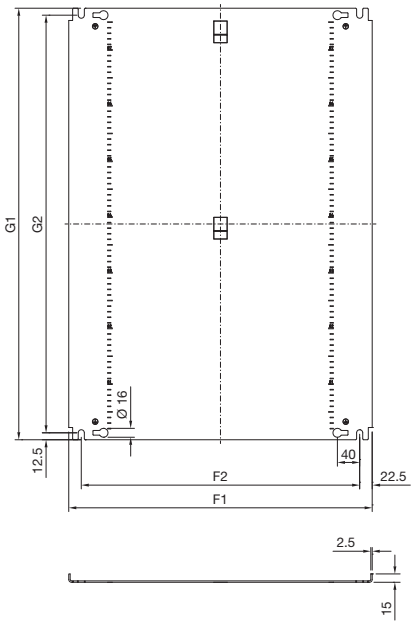


Basic enclosure AX

with 3-point locking system and one gland plate



Mounting plate type 1, with edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips
B5 = Mounting distance, door profile strips
B6 = Mounting distance, enclosures
B7 = Gland plate opening

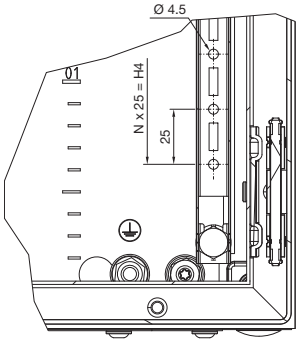
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H5 = Distance from bottom edge of door to bottom edge of lock plate
H6 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T4 = Spacing between holes for base/plinth
T7 = Gland plate opening

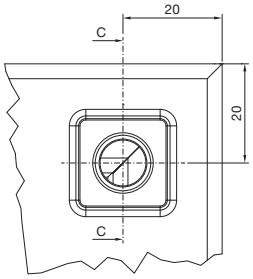
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

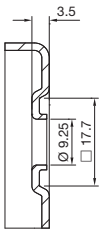
Detail X



Detail Y



Section C – C



Model No. AX	Width dimensions mm							Height dimensions mm							Depth dimensions mm					Mounting plate mm					Gland plate mm		
	B1	B2	B3	B4	B5	B6	B7	H1	H2	H3	H4	H5	H6	N	T1	T2	T3	T4	T7	F1	F2	G1	G2	Type	M	O	Type
1260.000	600	595	552.2	459.5	475	560	400	1200	1195	1156	1050	534.7	1160	42	300.7	277.5	277.2	187.5	185	545	500	1175	1150	1	436	221	7
1261.000	600	595	552.2	459.5	475	560	400	1200	1195	1156	1050	534.7	1160	42	400.7	377.5	377.2	287.5	185	545	500	1175	1150	1	436	221	7

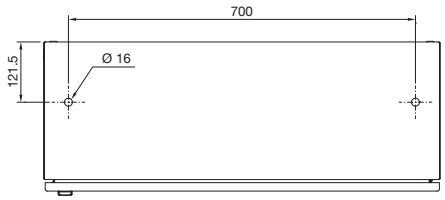
Compact enclosures AX, sheet steel

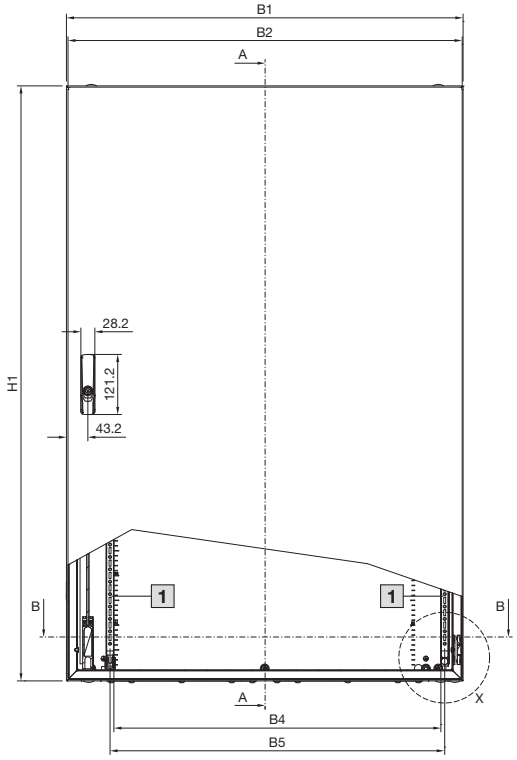
Basic enclosure AX

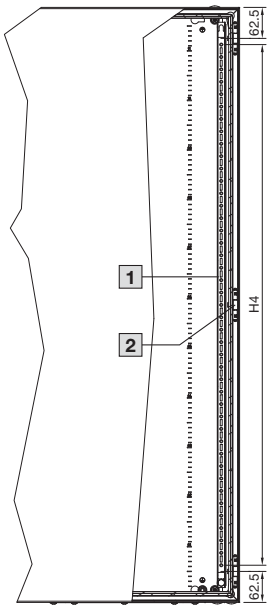
with 3-point locking system and two gland plates

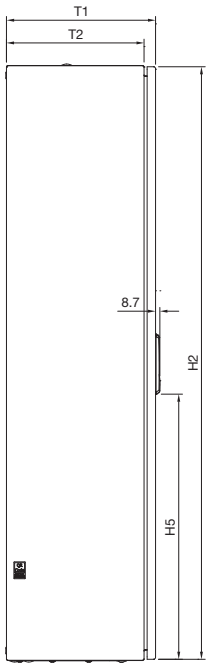
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Drilled holes for eyebolts

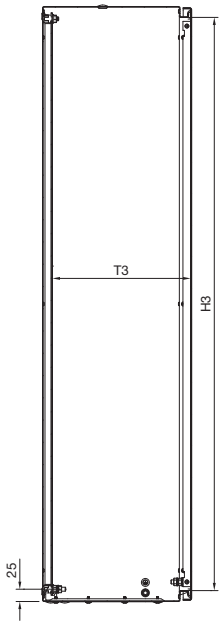


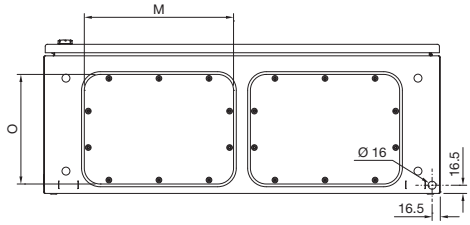


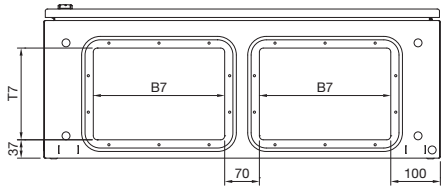




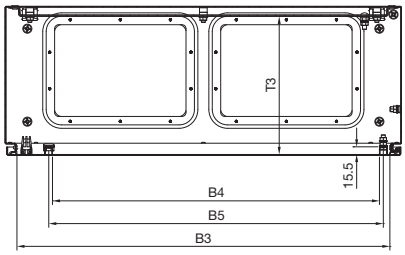
Section A – A



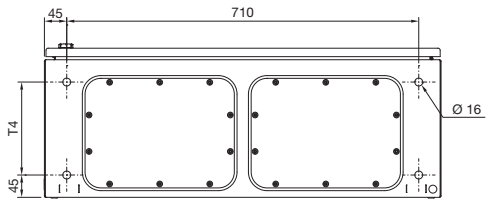




Section B – B

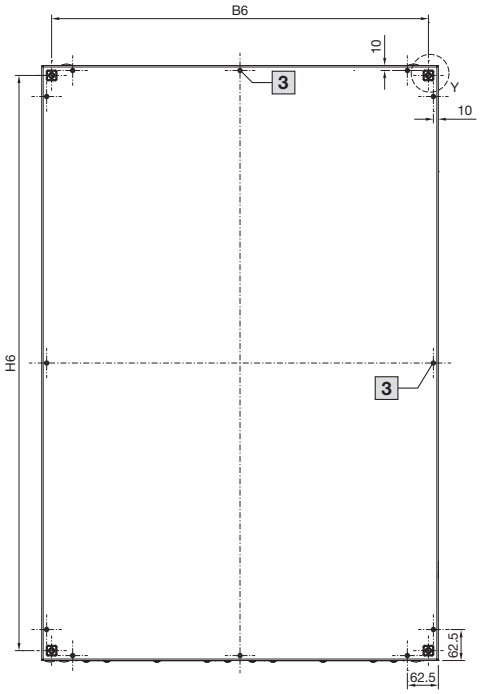


Drilled holes for base/plinth

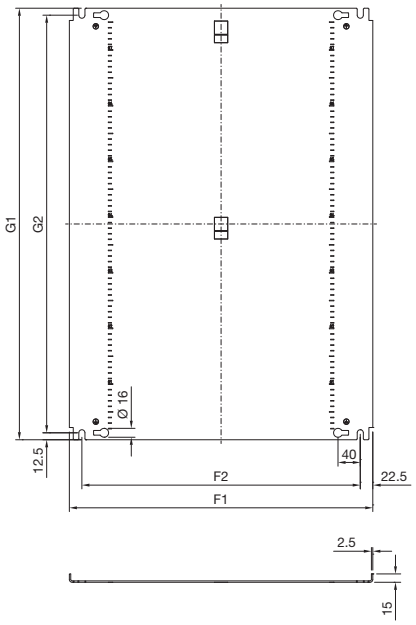


Basic enclosure AX

with 3-point locking system and two gland plates



Mounting plate type 1, with edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips
B5 = Mounting distance, door profile strips
B6 = Mounting distance, enclosures
B7 = Gland plate opening

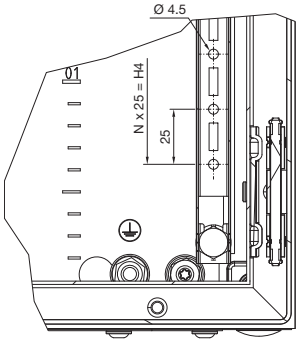
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H5 = Distance from bottom edge of door to bottom edge of lock plate
H6 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T4 = Spacing between holes for base/plinth
T7 = Gland plate opening

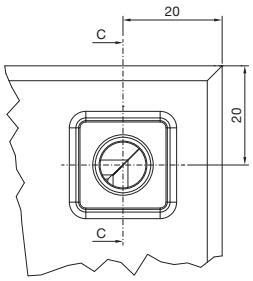
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

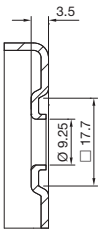
Detail X



Detail Y



Section C – C



Model No. AX	Width dimensions mm							Height dimensions mm							Depth dimensions mm					Mounting plate mm					Gland plate mm		
	B1	B2	B3	B4	B5	B6	B7	H1	H2	H3	H4	H5	H6	N	T1	T2	T3	T4	T7	F1	F2	G1	G2	Type	M	O	Type
1280.000	800	795	752.2	659.5	675	760	265	1200	1195	1156	1050	534.7	1160	42	300.7	277.5	278.7	187.5	185	745	700	1175	1150	1	301	221	5
1281.000	800	795	752.2	659.5	675	760	265	1200	1195	1156	1050	534.7	1160	42	400.7	377.5	378.7	287.5	185	745	700	1175	1150	1	301	221	5

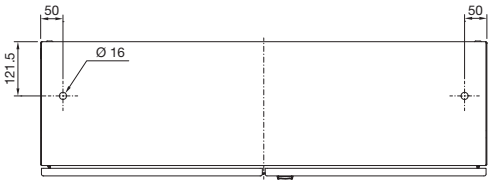
Compact enclosures AX, sheet steel

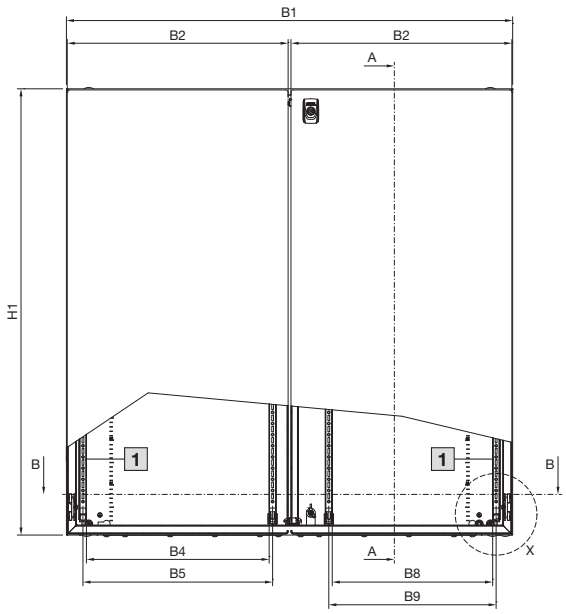
Basic enclosure AX

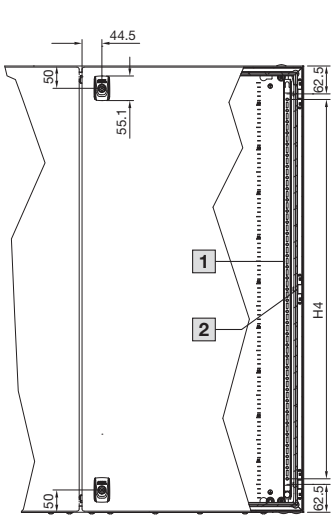
with cam lock, two-door

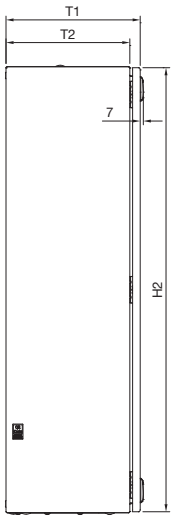
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Drilled holes for eyebolts (not applicable to 1100.000)

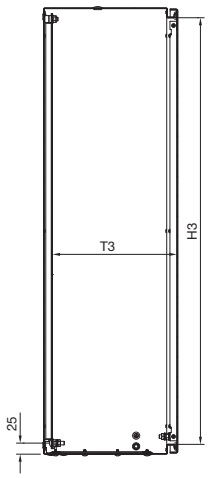


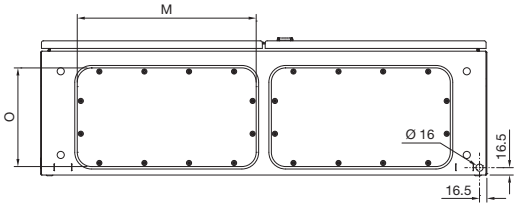


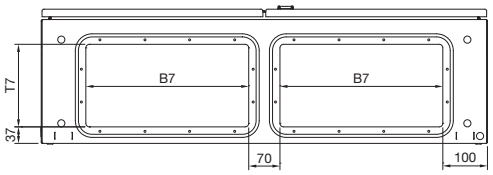




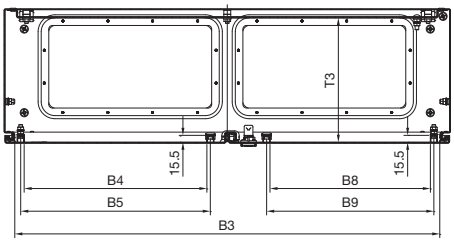
Section A – A

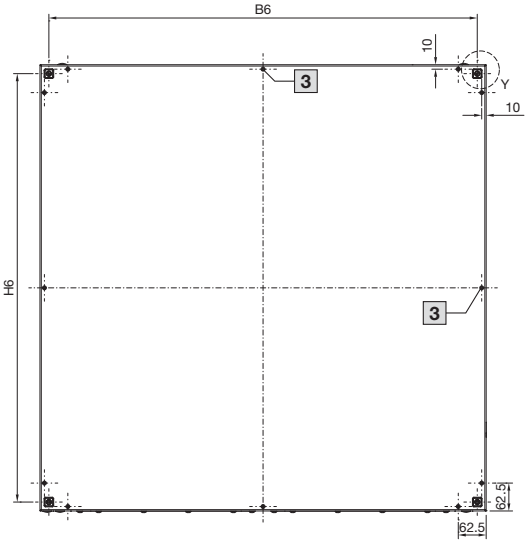




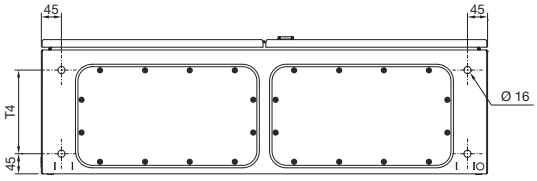


Section B – B





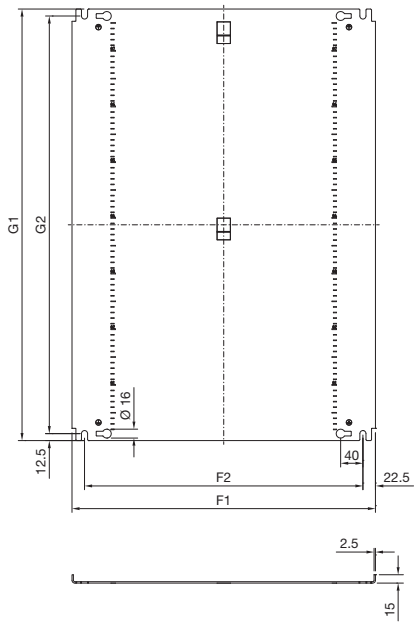
Drilled holes for base/plinth (not applicable to 1100.000)



Basic enclosure AX

with cam lock, two-door

Mounting plate type 1, with edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips, hinged door (left-hand door)
B5 = Mounting distance, door profile strips, hinged door (left-hand door)
B6 = Mounting distance, enclosures
B7 = Gland plate opening
B8 = Clearance width between door profile strips, locked door (right-hand door)
B9 = Mounting distance, door profile strips, locked door (right-hand door)

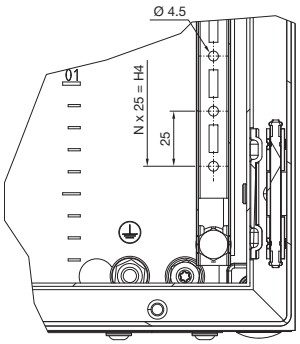
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H6 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T4 = Spacing between holes for base/plinth
T7 = Gland plate opening

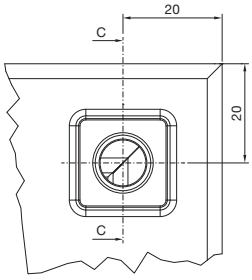
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

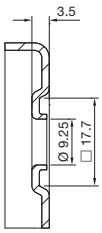
Detail X



Detail Y



Section C – C



Model No. AX	Width dimensions mm									Height dimensions mm						Depth dimensions mm				
	B1	B2	B3	B4	B5	B6	B7	B8	B9	H1	H2	H3	H4	H6	N	T1	T2	T3	T4	T7
1100.000	1000	495	952.4	409.5	425	960	411	359.5	375	760	755	716	600	720	24	210.7	187.5	188.7	–	113
1110.000	1000	495	952.4	409.5	425	960	365	359.5	375	1000	995	956	850	960	34	300.7	277.5	278.7	187.5	185
1130.000	1000	495	952.4	409.5	425	960	365	359.5	375	760	755	716	600	720	24	300.7	277.5	278.7	187.5	185

Model No. AX	Mounting plate mm					Gland plate mm		
	F1	F2	G1	G2	Type	M	O	Type
1100.000	945	900	735	710	1	447	149	3
1110.000	945	900	975	950	1	401	221	6
1130.000	945	900	735	710	1	401	221	6

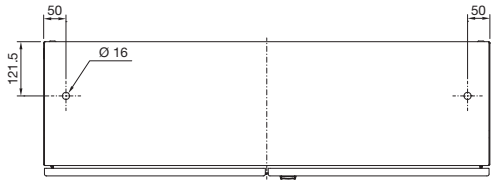
Compact enclosures AX, sheet steel

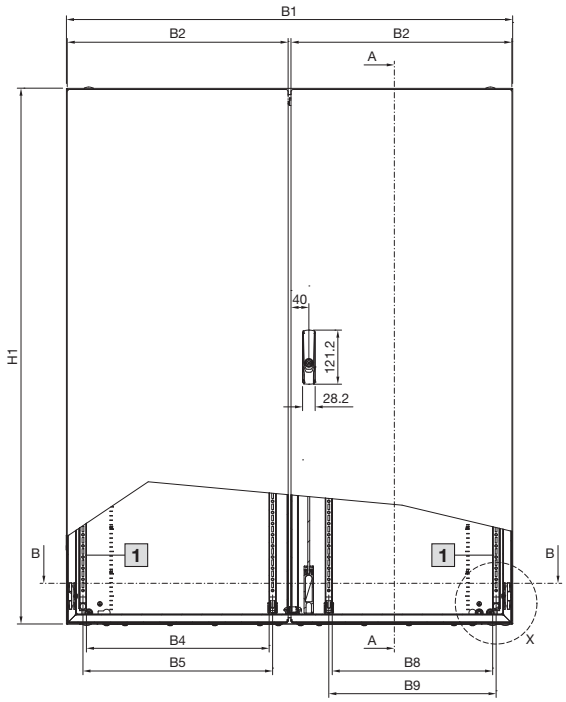
Basic enclosure AX

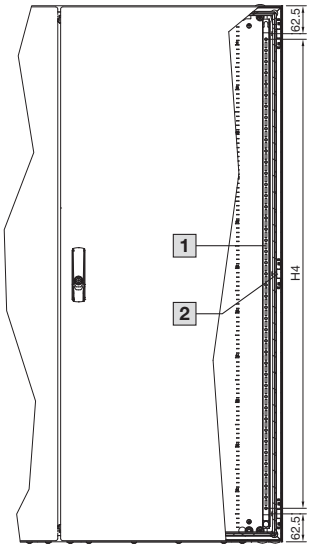
with 3-point lock system, double-door

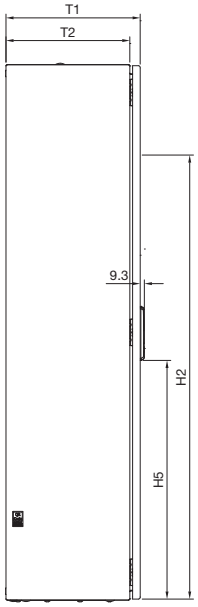
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Drilled holes for eyebolts

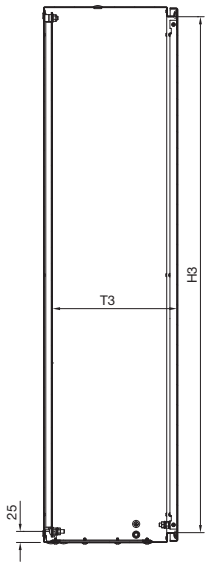




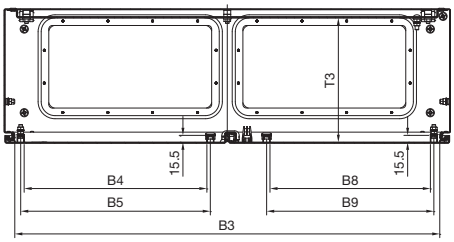


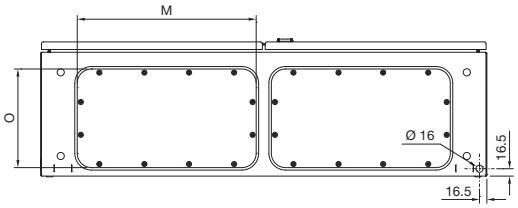


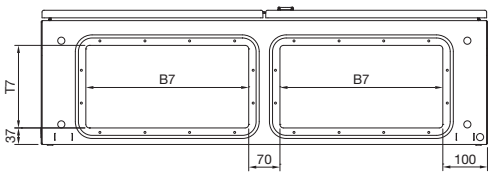
Section A – A

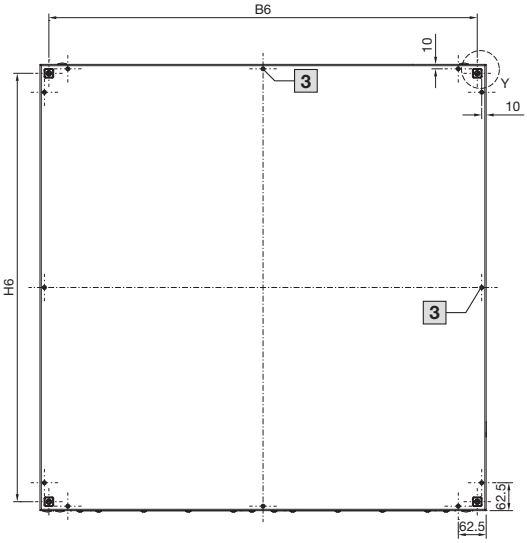


Section B – B

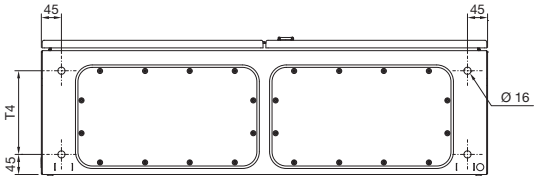








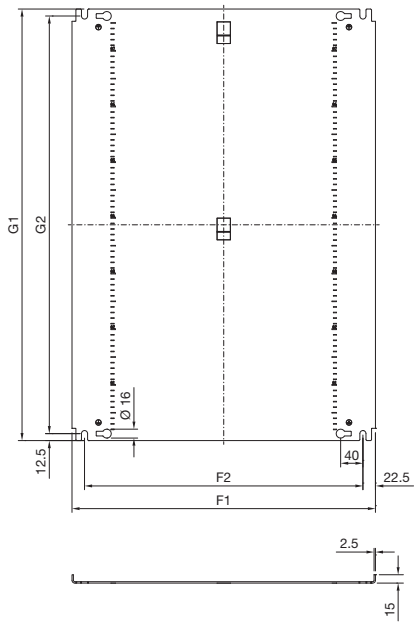
Drilled holes for base/plinth



Basic enclosure AX

with 3-point lock system, double-door

Mounting plate type 1, with edge fold



Enclosure
B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B4 = Clearance width between door profile strips, hinged door (left-hand door)
B5 = Mounting distance, door profile strips, hinged door (left-hand door)
B6 = Mounting distance, enclosures
B7 = Gland plate opening
B8 = Clearance width between door profile strips, locked door (right-hand door)
B9 = Mounting distance, door profile strips, locked door (right-hand door)

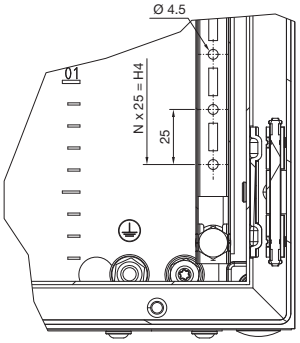
H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H4 = Overall height, 25 mm pitch pattern of holes
H5 = Distance from bottom edge of door to bottom edge of lock plate
H6 = Mounting distance, enclosures
N = No. of 25 mm pitch patterns of holes

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)
T4 = Spacing between holes for base/plinth
T7 = Gland plate opening

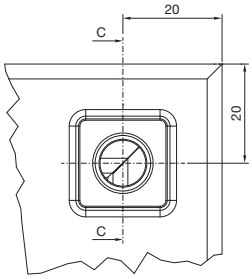
Mounting plate
F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Gland plate
M = Gland plate width
O = Gland plate depth
Type = Size of gland plate

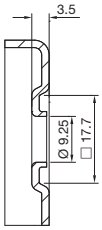
Detail X



Detail Y



Section C – C



Model No. AX	Width dimensions mm									Height dimensions mm							Depth dimensions mm				
	B1	B2	B3	B4	B5	B6	B7	B8	B9	H1	H2	H3	H4	H5	H6	N	T1	T2	T3	T4	T7
1213.000	1000	495	952.4	409.5	425	960	365	359.5	375	1200	1195	1156	1050	534.7	1160	42	300.7	277.5	278.7	187.5	185
1114.000	1000	495	952.4	409.5	425	960	365	359.5	375	1,400	1395	1356	1250	634.7	1360	50	300.7	277.5	278.7	187.5	185
1214.000	1000	495	952.4	409.5	425	960	365	359.5	375	1200	1195	1156	1050	534.7	1160	42	400.7	377.5	378.7	287.5	185
1115.000	1000	495	952.4	409.5	425	960	365	359.5	375	1,400	1395	1356	1250	634.7	1360	50	400.7	377.5	378.7	287.5	185
1116.000	1200	595	1152.4	509.5	525	1160	400	459.5	475	1200	1195	1156	1050	534.7	1160	42	400.7	377.5	378.7	287.5	185

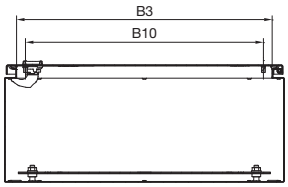
Model No. AX	Mounting plate mm					Gland plate mm		
	F1	F2	G1	G2	Type	M	O	Type
1213.000	945	900	1175	1150	1	401	221	6
1114.000	945	900	1375	1350	1	401	221	6
1214.000	945	900	1175	1150	1	401	221	6
1115.000	945	900	1375	1350	1	401	221	6
1116.000	1145	1100	1175	1150	1	436	221	7

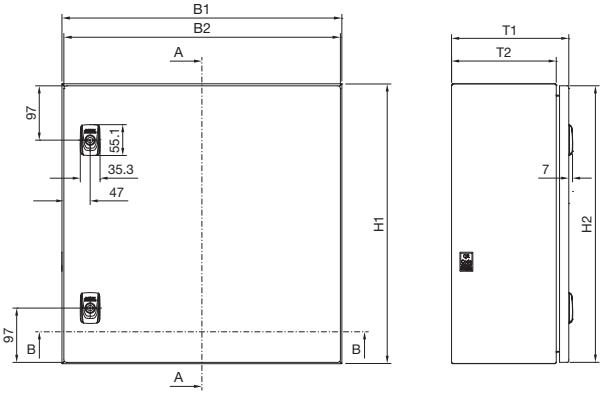
Compact enclosures AX, stainless steel

Basic enclosure AX
with cam lock, single-door

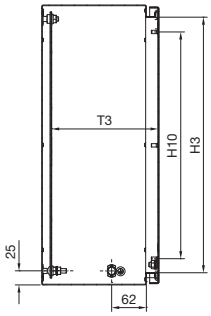
1 Door interior view
2 Central hinge, only where H1 > 800 mm
3 Central embossed half-shear, only where B1/H1 ≥ 500 mm
4 Not applicable to B1 = 300 mm

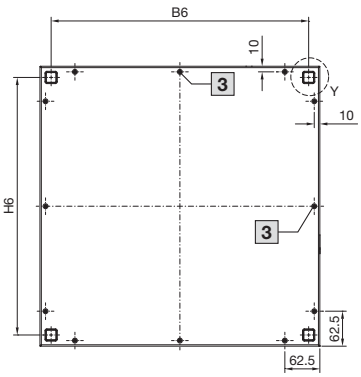
Section B – B

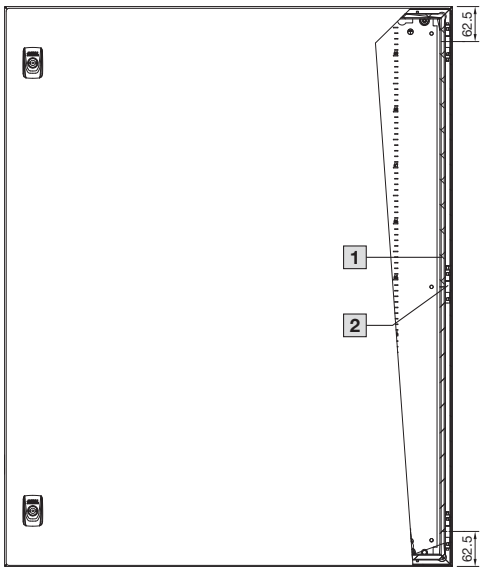




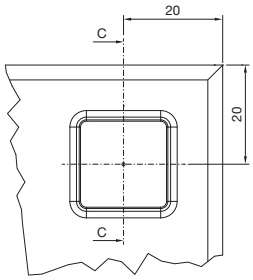
Section A – A



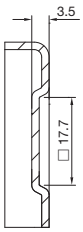




Detail Y



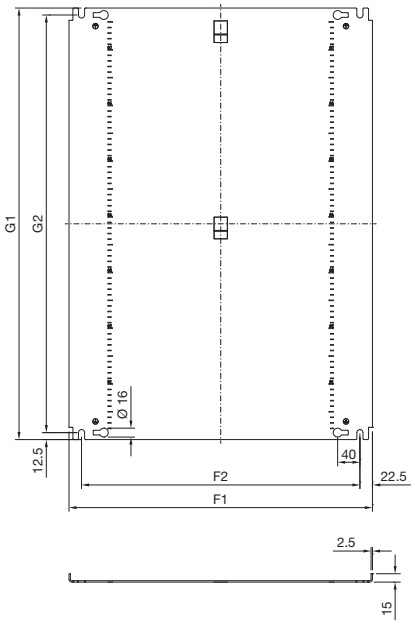
Section C – C



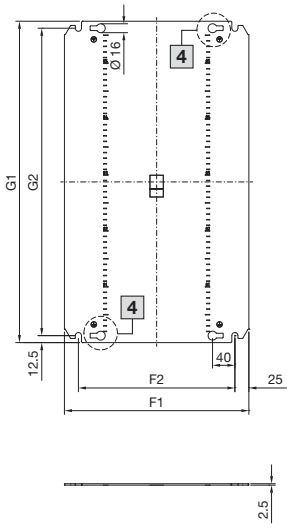
Basic enclosure AX

with cam lock, single-door

Mounting plate type 1,
with edge fold



Mounting plate type 2,
without edge fold



Enclosure

B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B6 = Mounting distance, enclosures
B10 = Distance between threaded bolts

H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H6 = Mounting distance, enclosures
H10 = Distance between threaded bolts

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)

Mounting plate

F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes

G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

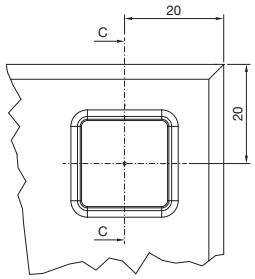
Model No. AX	Width dimensions mm					Height dimensions mm					Depth dimensions mm			Mounting plates mm				
	B1	B2	B3	B6	B10	H1	H2	H3	H6	H10	T1	T2	T3	F1	F2	G1	G2	Type
1003.000	300	294	256.5	260	225	300	294	256.5	260	205	209.4	187.0	189.9	250	200	275	250	2
1005.000	300	294	256.5	260	225	380	374	336.5	340	285	209.4	187.0	189.9	250	200	355	330	2
1006.000	380	374	336.5	340	305	380	374	336.5	340	285	209.4	187.0	189.9	330	280	355	330	2
1007.000	500	494	456.5	460	425	500	494	456.5	460	405	209.4	187.0	189.9	450	400	475	450	2
1008.000	380	374	336.5	340	305	600	594	556.5	560	505	209.4	187.0	189.9	330	280	575	550	2
1009.000	600	594	556.5	560	525	380	374	336.5	340	285	209.4	187.0	189.9	550	500	355	330	2
1010.000	600	594	556.0	560	525	600	594	556	560	505	209.4	187.5	189.9	550	500	575	550	2
1011.000	380	374	336.5	340	305	300	294	256.5	260	205	209.4	187.0	189.9	330	280	275	250	2
1012.000	600	595	556.0	560	525	760	755	716.5	720	665	209.4	187.5	189.9	550	500	735	710	2
1013.000	500	494	456.0	460	425	500	494	456.5	460	405	300.4	277.5	280.9	450	400	475	450	2
1014.000	760	755	716.0	720	685	760	755	716.5	720	665	300.4	277.5	280.9	705	660	735	710	1
1015.000	400	394	356.5	360	325	500	494	456.5	460	405	209.4	187.0	189.9	350	300	475	450	2
1016.000	800	795	756.0	760	725	1000	995	956.5	960	905	300.4	277.5	280.9	745	700	975	950	1
1302.000	300	294	256.5	260	225	380	374	336.5	340	285	209.4	187.0	189.9	250	200	355	330	2
1303.000	380	374	336.5	340	305	380	374	336.5	340	285	209.4	187.0	189.9	330	280	355	330	2
1304.000	600	594	556.0	560	525	600	594	556.5	560	505	209.4	187.5	189.9	550	500	575	550	2

Compact enclosures AX, stainless steel

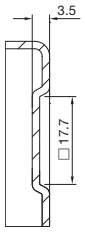
Basic enclosure AX

with 3-point lock system, single-door

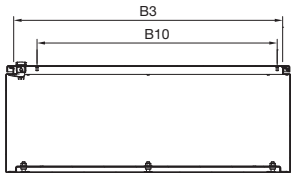
Detail Y

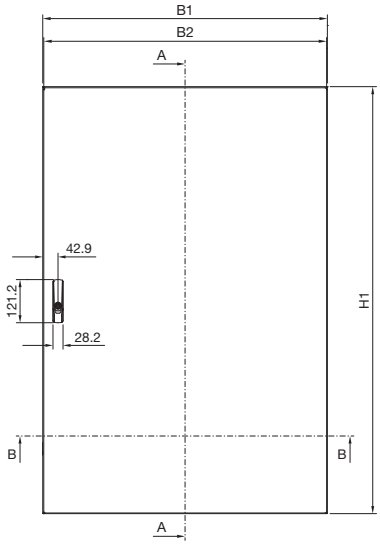


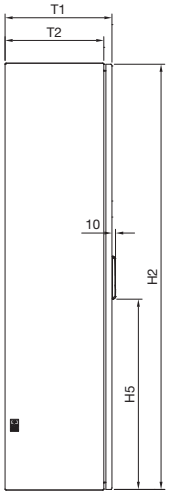
Section C – C



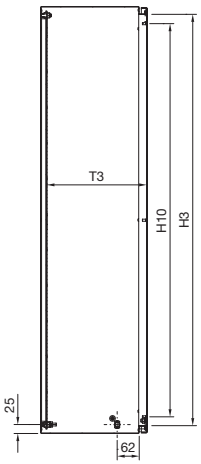
Section B – B

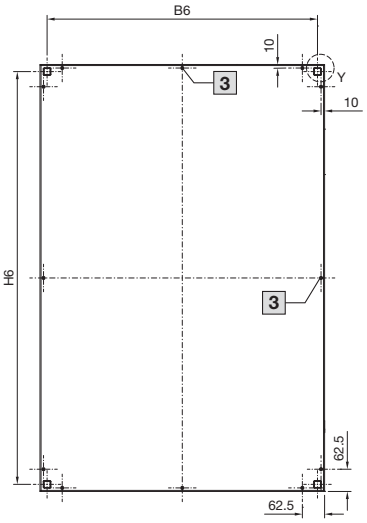


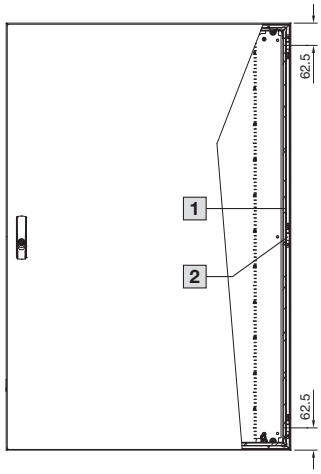




Section A – A





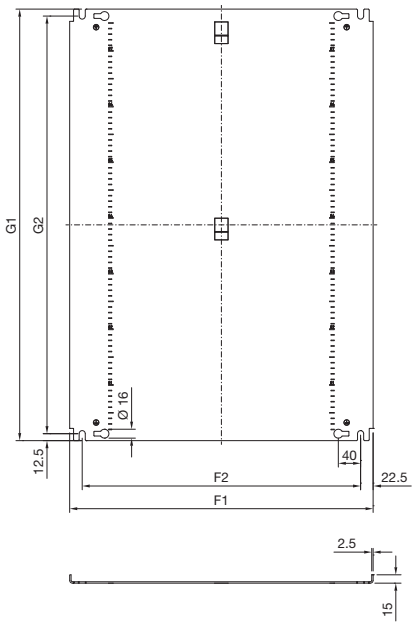


1 Door interior view

2 Central hinge, only where H1 > 800 mm

3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Mounting plate type 1, with edge fold



Enclosure

B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B6 = Mounting distance, enclosures
B10 = Distance between threaded bolts

H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H5 = Bottom edge of door to bottom edge of lock plate
H6 = Mounting distance, enclosures
H10 = Distance between threaded bolts

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)

Mounting plate

F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes

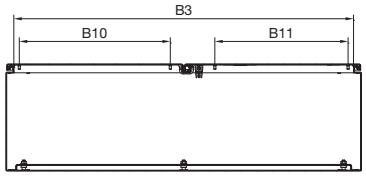
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Model No. AX	Width dimensions mm					Height dimensions mm						Depth dimensions mm			Mounting plates mm				
	B1	B2	B3	B6	B10	H1	H2	H3	H5	H6	H10	T1	T2	T3	F1	F2	G1	G2	Type
1017.000	800	795	756	760	675	1200	1195	1156	534.7	1160	1150	300.4	277.5	280.4	745	700	1175	1150	1

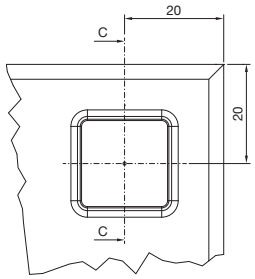
Basic enclosure AX

with cam lock, double-door
with 3-point locking system, double-door

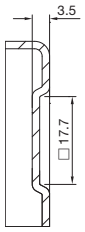
Section B – B



Detail Y

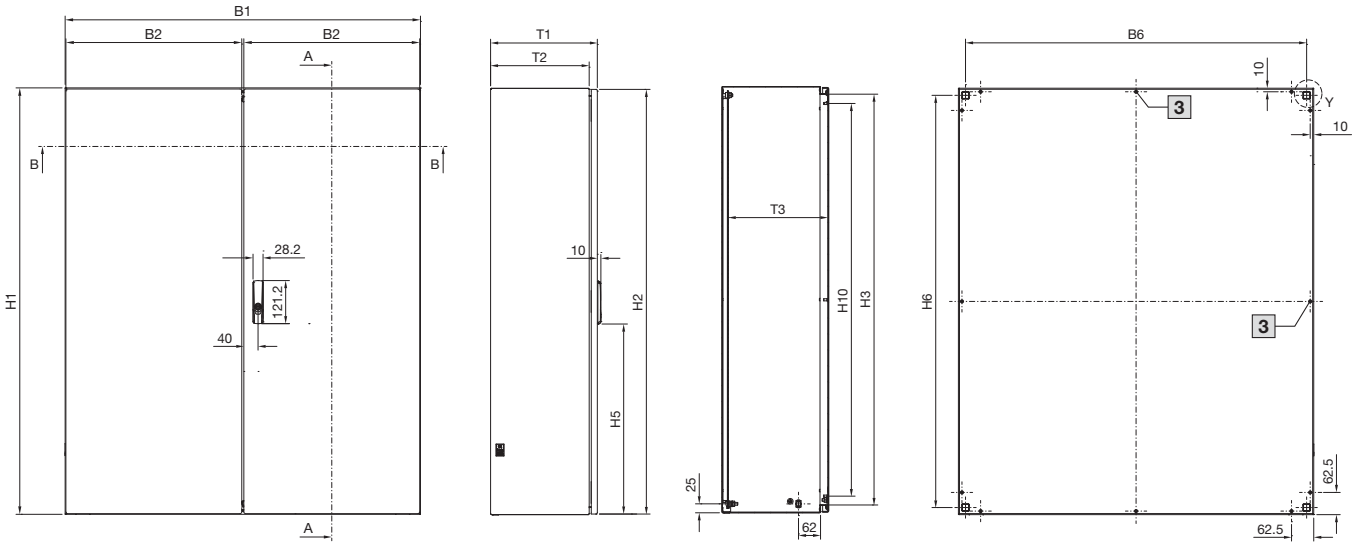


Section C – C

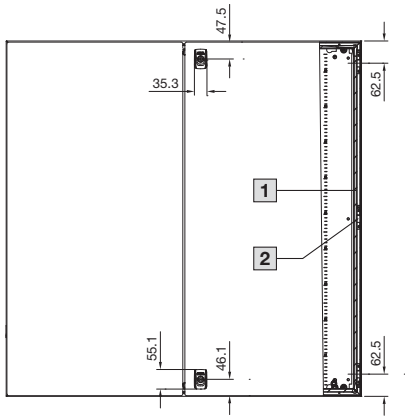


With 3-point lock system where H1 > 1000 mm

Section A – A



With cam lock where H1 ≤ 1000 mm

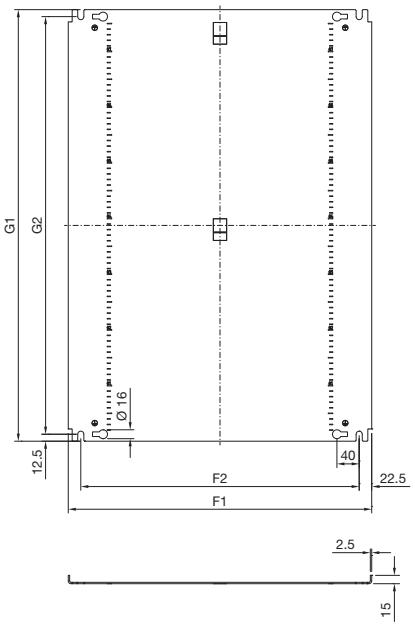


1 Door interior view

2 Central hinge, only where H1 > 800 mm

3 Central embossed half-shear, only where B1/H1 ≥ 500 mm

Mounting plate type 1, with edge fold



Enclosure

B1 = Enclosure width (overall width)
B2 = Door width
B3 = Clearance width, enclosure opening
B6 = Mounting distance, enclosures
B10 = Distance between threaded bolts, adjacent door
B11 = Distance between threaded bolts, locked door

H1 = Enclosure height (overall height)
H2 = Door height
H3 = Clearance height, enclosure opening
H5 = Bottom edge of door to bottom edge of lock plate
H6 = Mounting distance, enclosures
H10 = Distance between threaded bolts

T1 = Overall depth
T2 = Enclosure depth
T3 = Installation depth (distance from inside of door to mounting plate)

Mounting plate

F1 = Mounting plate width
F2 = Centre-to-centre spacing of the attachment holes

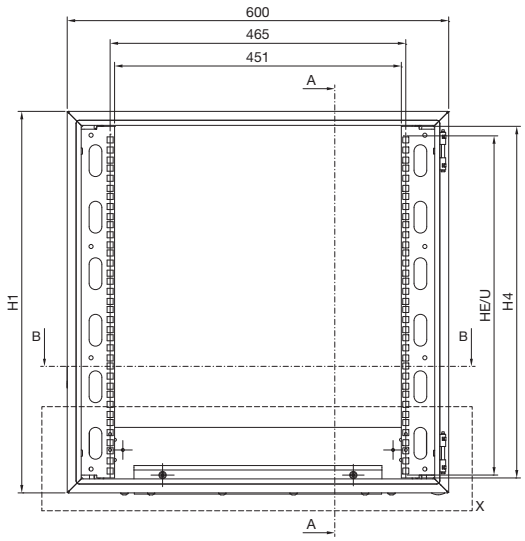
G1 = Mounting plate height
G2 = Centre-to-centre spacing of the attachment holes

Model No. AX	Width dimensions mm						Height dimensions mm						Depth dimensions mm			Mounting plates mm				
	B1	B2	B3	B6	B10	B11	H1	H2	H3	H5	H6	H10	T1	T2	T3	F1	F2	G1	G2	Type
1018.000	1000	495	956	960	425	375	1000	995	956	–	960	905	300.4	277.5	280.4	945	900	975	950	1
1019.000	1000	495	956	960	425	375	1200	1195	1156	535.4	1160	1105	300.4	277.5	280.4	945	900	1175	1150	1
1305.000	1000	495	956	960	425	375	1200	1195	1156	535.4	1160	1105	300.4	277.5	280.4	945	900	1175	1150	1

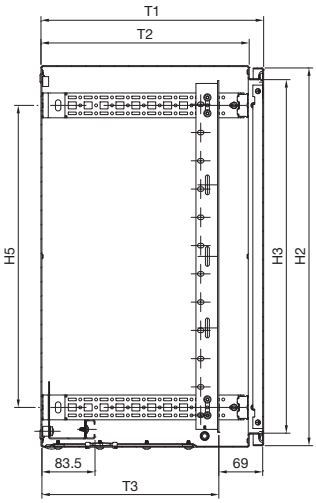
Compact enclosures AX

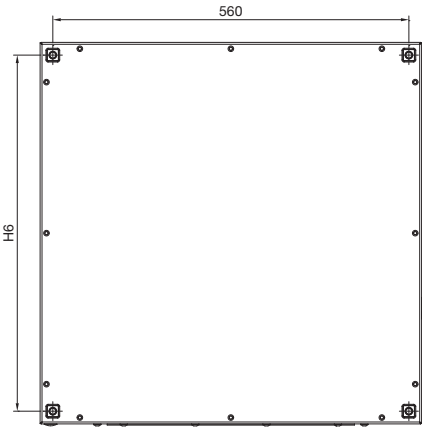
Wall-mounted enclosures AX IT

with 482.6 mm (19") mounting angles, depth-variable

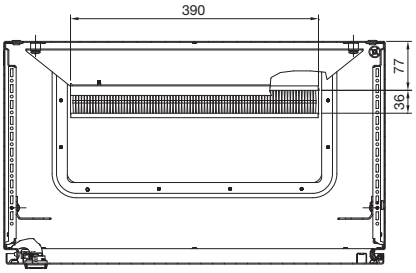


Section A – A

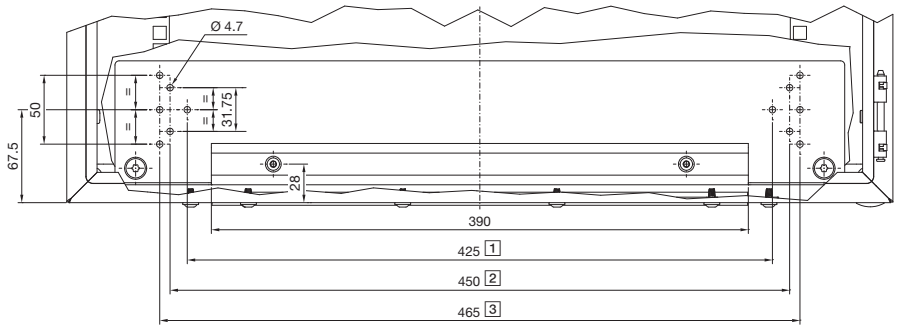




Section B – B



Detail X



1 For earth rail
DK 7113.000

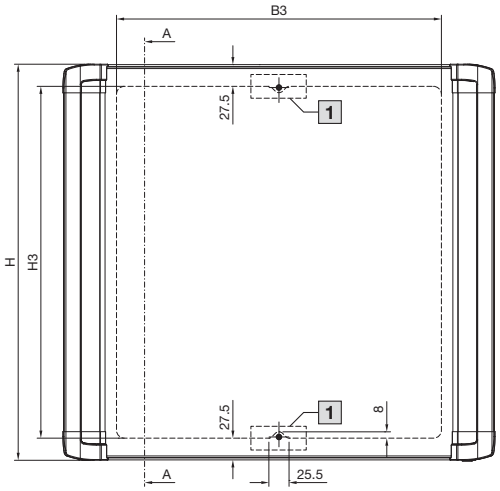
2 For 482.6 mm (19") socket strip, 1 U
DK 7240.XXX

3 For 482.6 mm (19") socket strip, 2 U
DK 7000.630

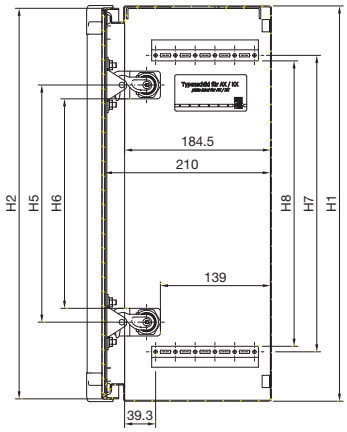
Model No. AX IT	Height dimensions mm							Depth dimensions mm		
	U	H1	H2	H3	H4	H5	H6	T1	T2	T2
7641.350	7	380	374	336	333	255	340	350	327.5	278
7643.350	12	600	594	556	553	475	560	350	327.5	278
7645.350	16	760	754	716	711	635	720	350	327.5	278
7646.400	16	800	794	756	711	650	760	400	377.5	316

Command panel AX

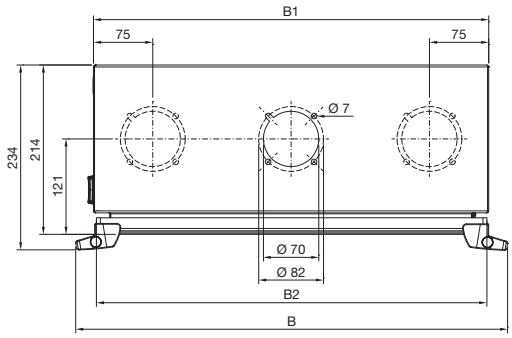
with handle strips, service access from the front



Section A – A



1 Not applicable to AX 6315.150



Enclosure

B = Overall width with handle strips
B1 = Enclosure width
B2 = Door width
B3 = Maximum usable mounting space in the width

H = Overall height with handle strips
H1 = Enclosure height
H2 = Door height
H3 = Maximum usable mounting space in the height
H5 = Lock spacing
H6 = Clearance height between positioning brackets
H7 = Mounting distance between mounting brackets
H8 = Clearance height between mounting brackets

Model No. AX	Width dimensions mm				Height dimensions mm							
	B	B1	B2	B3	H	H1	H2	H3	H5	H6	H7	H8
6315.150	345	300	294	211	301	300	294	245	–	–	175	161
6315.250	425	380	374	291	301	300	294	245	–	–	175	161
6315.350	425	380	374	291	381	380	374	325	–	–	275	261
6315.450	545	500	494	411	501	500	494	445	300	265	375	361
6315.650	645	600	594	511	601	600	594	545	400	365	475	461

Compact enclosures AX

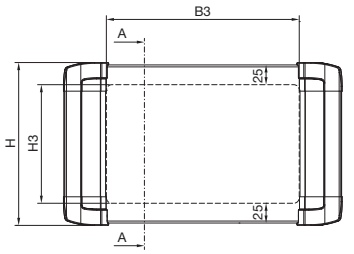
Command panel AX

with handle strips, service access from the rear

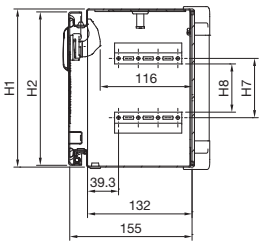
Enclosure
B = Overall width with handle strips
B1 = Enclosure width
B2 = Door width
B3 = Maximum usable mounting space in the width

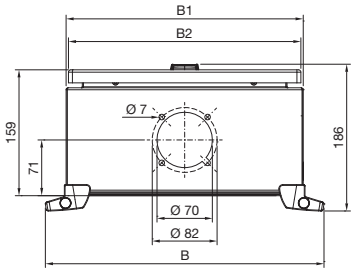
H = Overall height with handle strips
H1 = Enclosure height
H2 = Door height
H3 = Maximum usable mounting space in the height
H7 = Mounting distance between mounting brackets
H8 = Clearance height between mounting brackets

AX 6320.050

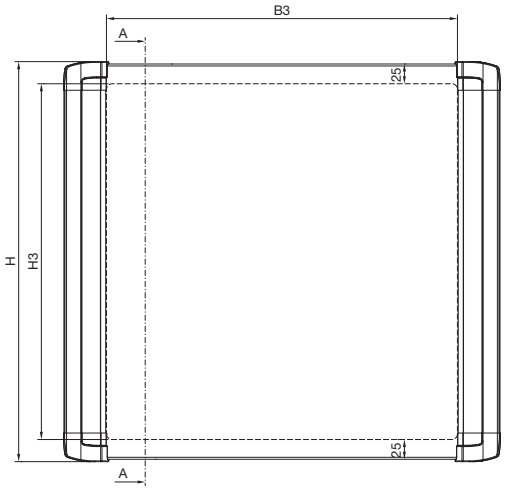


Section A – A

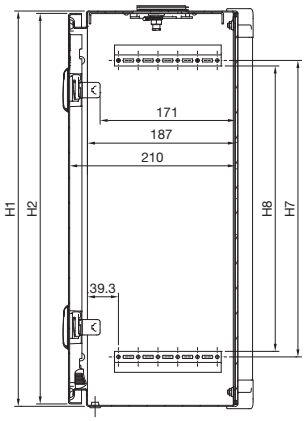


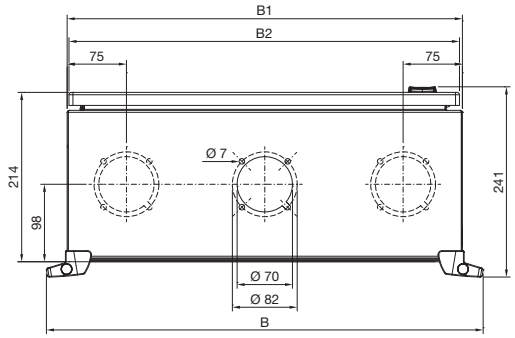


AX 6320.350, AX 6320.450, AX 6320.550, AX 6320.650



Section A – A



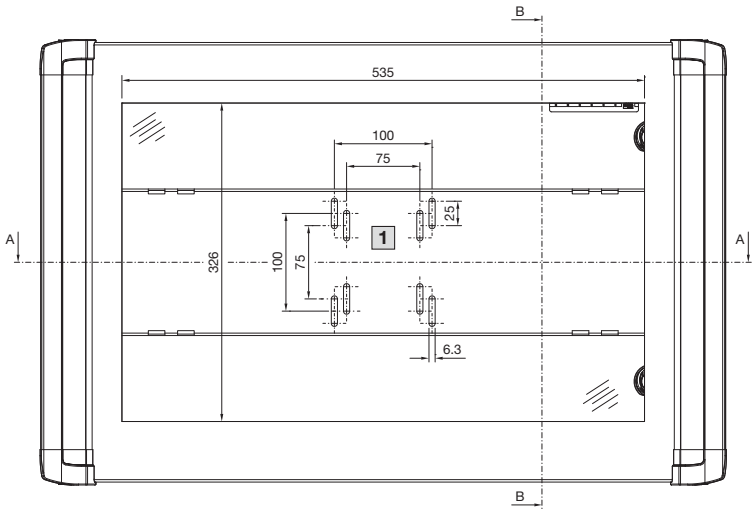


Model No. AX	Width dimensions mm				Height dimensions mm					
	B	B1	B2	B3	H	H1	H2	H3	H7	H8
6320.050	352.5	300	294	244	206	200	194	150	75	61
6320.350	432.5	380	374	324	386	380	374	330	275	261
6320.450	552.5	500	494	444	506	500	494	450	375	361
6320.550	652.5	600	594	544	386	380	374	330	275	261
6320.650	652.5	600	594	544	606	600	594	550	475	461

Command panel AX

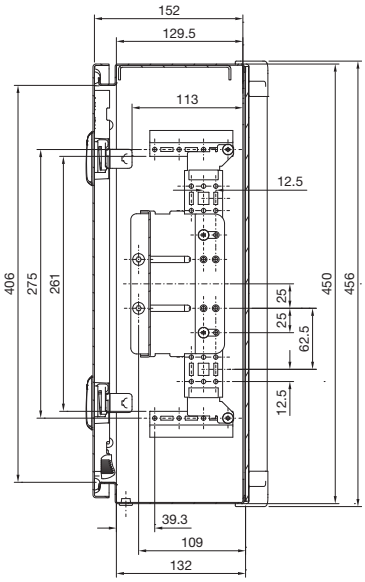
for desktop TFT up to 24"

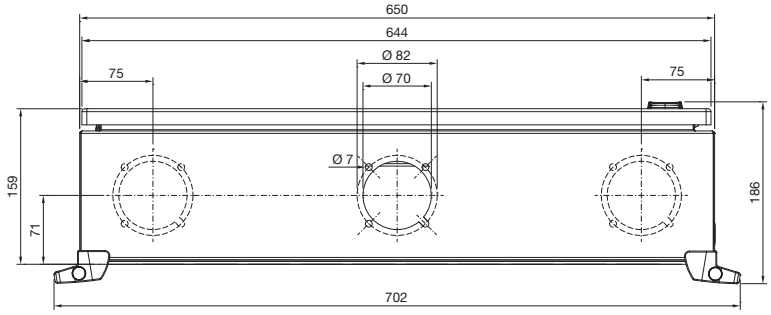
AX 6321.050



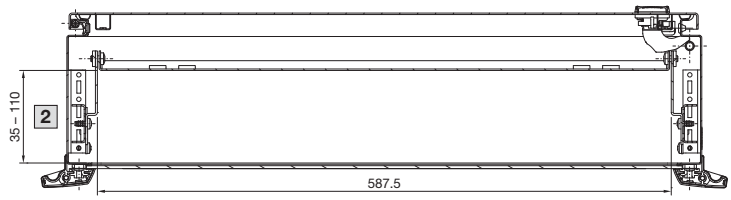
1 Monitor infinitely adjustable in the height

Section B – B





Section A – A



2 Monitor infinitely adjustable in the depth

Rittal – The System.

Faster – better – everywhere.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

You can find the contact details of all
Rittal companies throughout the world here.

www.rittal.com/contact

XWW00195EN2008

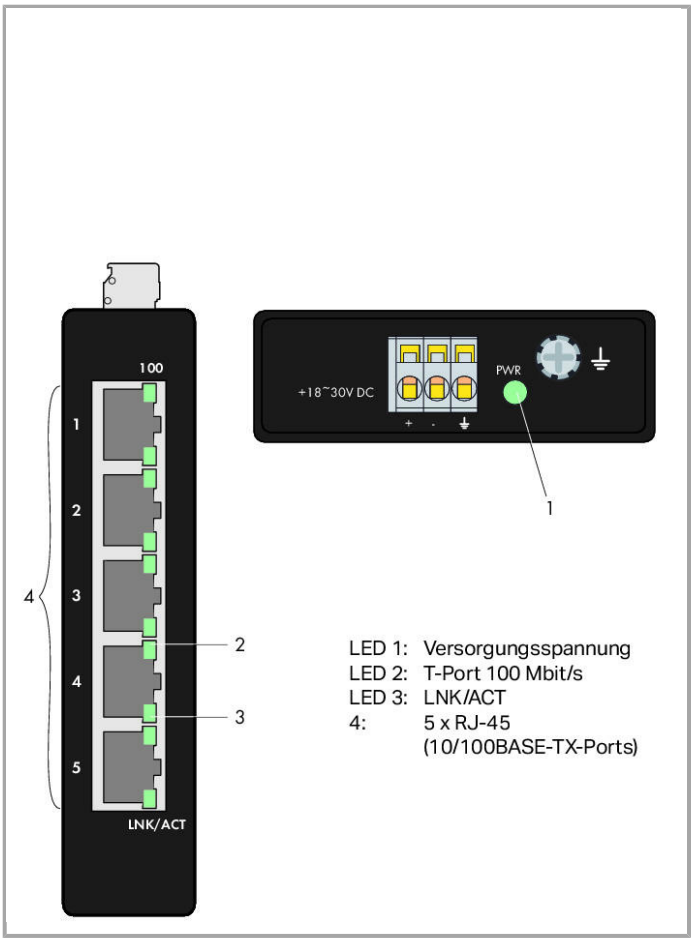
ENCLOSURES | POWER DISTRIBUTION | CLIMATE CONTROL | IT INFRASTRUCTURE | SOFTWARE & SERVICES

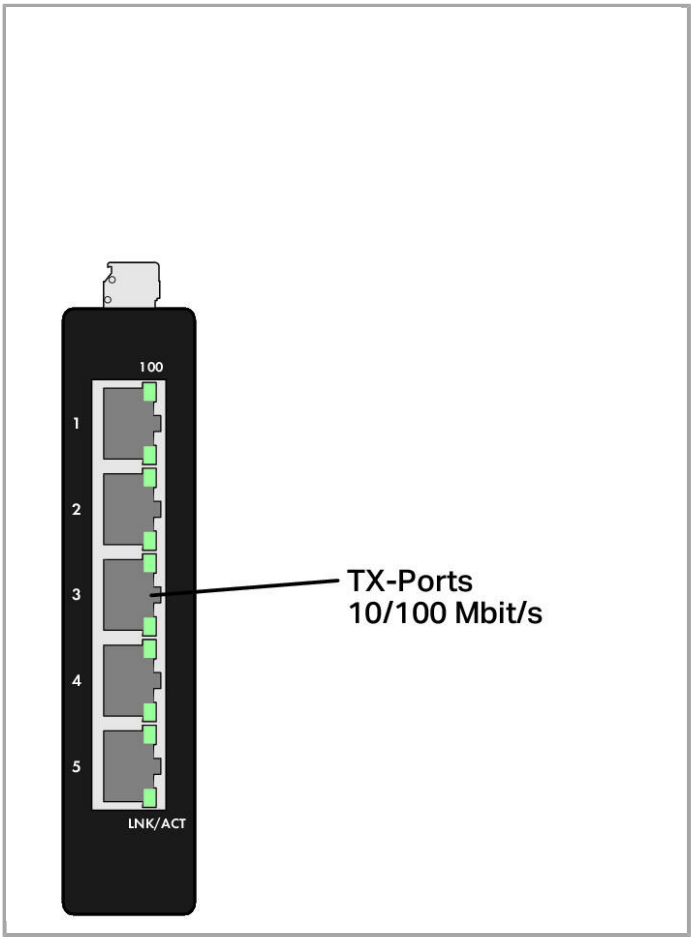
FRIEDHELM LOH GROUP

RoHS ✓ Compliant

BOMcheck.net

Color: ■





Item description

The 852-111 is a 5-port 10/100Base-TX industrial ETHERNET switch supporting Auto-Negotiation and Auto-MDI-/MDI-X detection for each port.

Using the switch's 5 ports, several segments can be created to reduce the network load, while providing a dedicated bandwidth to each user node. The 852-111 switch is a cost-effect solution to keep up with the constant demands of IP-based, industrial communication needs.

The switch is easy to configure and install and is best suited for small to medium-sized networks.

Features:

- 5 ETHERNET ports, 10/100 Mbps autonegotiation
- Front-panel diagnostic LEDs
- Supports Auto-MDI/MDI-X functions
- Full/half-duplex transfer modes for each port
- Store-and-forward switching method
- Integrated address look-up table, supports 2000 absolute MAC addresses
- Overvoltage protection
- IEEE 802.3x flow control in full-duplex mode
- DIN-35 rail mounting

Data

Technical Data

Switchingmodus	Store-and-forward, non-blocking
Number of 100Base-TX ports	5
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x Flow Control
MAC table (large)	2000 addresses
Jumbo frame size	1536 Byte
Supply voltage	DC 18 … 30 V
Energy consumption max.	3 W
Baud rate	Copper cable: 10/100Mbit/s
Übertragungsmedium (Kommunikation/Feldbus)	Copper cable: Cat. 5 or higher, 100 m maximum cable length
Topology	Star
Indicators	Device: LED (PWR) green: Power supply; per port: LED (100, LNK /ACT) green: Status 100 Mbps, LNK/ACT port 1 … 5

Connection data

Anschlusstechnik: Kommunikation/Feldbus	Copper cable: 5 x RJ-45
Anschlusstechnik: Versorgung	1 x im Gerät verbaute Stiftleiste: 231-433/001-000; mitgelieferte Federleiste (Steckverbinder MCS): 231-103/026-000

Geometrical Data

Width	23.4 mm / 0.921 inch
Height from upper-edge of DIN-35 rail	81 mm / 3.189 inch
Depth	109.2 mm / 4.299 inch

Mechanical data

Weight	352 g
Color	black
Housing material	Sheet steel

Environmental Requirements

Surrounding air (operating) temperature	-40 … 70 °C
Surrounding air (storage) temperature	-40 … 80 °C
Degree of protection	IP30
Relative air humidity (no condensation)	95 %
Type of mounting	DIN-35 rail
Vibration resistance	acc. to IEC 60068-2-6

Shock resistance	acc. to IEC 60068-2-27
Fire load	5.28 MJ

Commercial data

Country of origin	TW
GTIN	4045454847593
Customs Tariff No.	85176200000
Product Group	27 (Special components I/O)

Approvals / Certificates

Ship Approvals

Logo	Approval	Certificate name
	DNV DNV Germany GmbH	A-14050

Compatible products

General accessories

	**Item no.: 852-9101** DNV Carrier rail adapter; for ETHERNET Switches 852-111/ 852-1111 marine approval	www.wago.com/852-9101

transfer module

	**Item no.: 289-172** Interface module for ETHERNET RJ-45	www.wago.com/289-172
	**Item no.: 289-175** Interface module for ETHERNET RJ-45	www.wago.com/289-175
	**Item no.: 289-195** Interface module for ETHERNET RJ-45; for DIN 35 rail; with shield connection	www.wago.com/289-195
	**Item no.: 289-196** Interface module with RJ-45 connectors; CAGE CLAMP®CONNECTION; with LED; Fused	www.wago.com/289-196

wiring and connectors

	**Item no.: 750-975** ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-975
	**Item no.: 750-976** PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-976
	**Item no.: 750-977/000-011** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	www.wago.com/750-977/000-011

Item no.: 750-977/000-012
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22

www.wago.com/750-977/000-012

Item no.: 750-977/000-013
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22

www.wago.com/750-977/000-013

Item no.: 750-977/000-021
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24

www.wago.com/750-977/000-021

Item no.: 750-977/000-022
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24

www.wago.com/750-977/000-022

Item no.: 750-978/000-011
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief

www.wago.com/750-978/000-011

Item no.: 750-978/000-012
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief

www.wago.com/750-978/000-012

Item no.: 750-978/000-013
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief

www.wago.com/750-978/000-013

Item no.: 750-978/000-021
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief

www.wago.com/750-978/000-021

Item no.: 750-978/000-022
Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief

www.wago.com/750-978/000-022

Item no.: 750-979/000-011
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief

www.wago.com/750-979/000-011

Item no.: 750-979/000-012
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief

www.wago.com/750-979/000-012

Item no.: 750-979/000-013
Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief

www.wago.com/750-979/000-013

Item no.: 750-979/000-021
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief

www.wago.com/750-979/000-021

Item no.: 750-979/000-022
Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief

www.wago.com/750-979/000-022

power supply

	**Item no.: 787-1102** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 1.3 A output current; DC OK signal	www.wago.com/787-1102
	**Item no.: 787-1112** Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC OK signal	www.wago.com/787-1112
	**Item no.: 787-1122** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 4 A output current; DC OK signal	www.wago.com/787-1122
	**Item no.: 787-1226** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 6 A output current	www.wago.com/787-1226
	**Item no.: 787-1702** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 1.25 A output current	www.wago.com/787-1702
	**Item no.: 787-1712** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current	www.wago.com/787-1712
	**Item no.: 787-1722** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current	www.wago.com/787-1722

Downloads

Documentation

Manual

5-Port 100BASE-TX Industrial ECO Switch	13-ott-2015	916.0 kB	Download

Bid Text

852-111 Switche	21-gen-2016	DOC 27.6 kB	Download

Instruction Leaflet

Operating and assembly instructions 852-111 / 852-112	8-mag-2014	PDF 1.7 MB	Download

Installation manual

Operating and assembly instructions 852-111 / 852-112	8-mag-2014	PDF 1.7 MB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	15-ott-2018	265.8 kB	Download

System Description

Industrial Switches – General Product Information

Industrial Switches – General Product Information	6-giu-2017	514.9 kB	Download

smartDATA

CAD data

3D Download 852-111	URL	Download

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

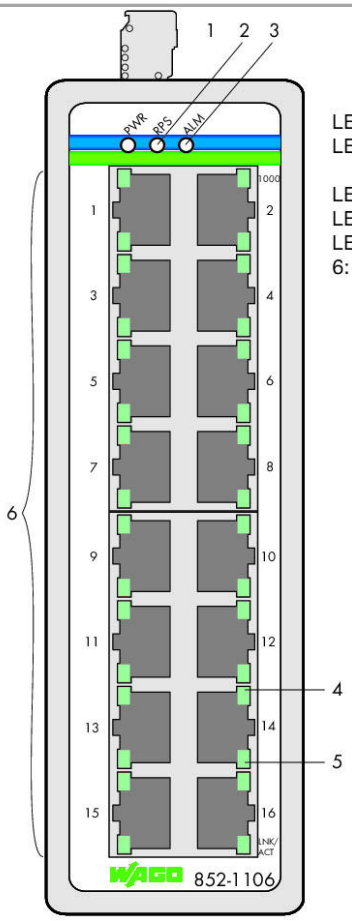
Industrial-Switch; 16 Ports 1000Base-T; Extended temperature range

www.wago.com/852-1106

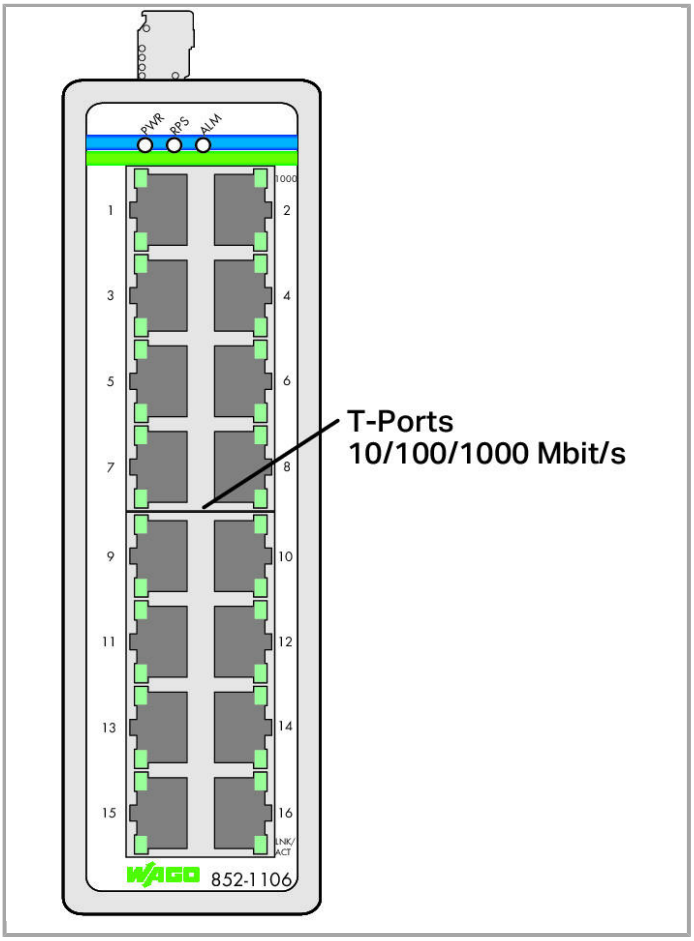
RoHS ✓ Compliant

BOMcheck.net

Color: ■



LED 1: Versorgungsspannung
LED 2: Redundante Versorgungsspannung
LED 3: Alarm
LED 4: 1000 Mbit/s
LED 5: LNK/ACT
6: T-Ports 10/100/1000 Mit/s (16)



Item description

The 852-1106 Industrial Switch is a 16-port 10/100/1000Base-T ETHERNET switch.

The switch has a rugged metal housing, redundant power supply and function monitoring with a relay. These functions and an operating range of −40 to +70°C make it ideal for a wide range of industrial applications.

Features:

- Redundant DC power supply
- Wide supply voltage range: 12 … 60 VDC
- DIP switches to set alarm functions
- Full compliance with IEEE 802.3, 802.3u and 802.3ab standards
- Non-blocking, store-and-forward switching
- Auto-Negotiation on all 10/100/1000Base-T ports
- Auto-MDI/MDIX (crossover) at all 10/100/1000Base-T ports
- Integrated address look-up table, supports up to 8000 absolute MAC addresses
- Overvoltage protection
- Prioritization of Profinet Ethernet Frame (EtherType=0x8892) according to IEEE802.1p

Data

Technical Data

Switchingmodus	Store-and-forward, non-blocking
Number of 1000Base-T ports	16
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE 802.3ab 1000BASE-T IEEE 802.3x Flow Control IEEE 802.3az Energy Efficient Ethernet IEEE 802.1p Prioritization
Redundancy function	Redundant DC power supply
Configuration options	DIP switch for signal contact
Diagnostics	Signal contact
MAC table (large)	8000 addresses
Jumbo frame size	10000 Byte
Supply voltage	DC 12 … 60 V
Energy consumption max.	12 W
Baud rate	Copper cable: 10/1000Mbit/s
Transmission medium (communication/fieldbus)	Copper cable: Cat. 5e or higher, 100 m maximum cable length
Panel	2 x DIP switch: Alarm function power supplies
Indicators	Device: LED (PWR, RPS) green: Power supply (primary), redundant power supply (secondary); LED (ALM) red: Alarm; per port: LED (1000, LNK/ACT) green: Status 1000 Mbps, LNK/ACT Port 1 … 16

Connection data

Connection technology: communication/fieldbus	Copper cable: 16 x RJ-45
Anschlusstechnik: Versorgung	1 x im Gerät verbaute Stiftleiste: 231-436/001-000; mitgelieferte Federleiste (Steckverbinder MCS): 2231-106/026-000

Geometrical Data

Width	50 mm / 1.969 inch
Height from upper-edge of DIN-35 rail	120 mm / 4.724 inch
Depth	162 mm / 6.378 inch

Mechanical data

Weight	840 g
Color	metallic black
Housing material	Aluminum
Conformity marking	CE

Environmental Requirements

Surrounding air (operating) temperature	-40 … 70 °C
Surrounding air (storage) temperature	-40 … 80 °C
Degree of protection	IP30
Relative air humidity (no condensation)	95 %
Type of mounting	DIN-35 rail
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4

Commercial data

Country of origin	TW
GTIN	4055143604659
Customs Tariff No.	85176200000

Compatible products

power supply

	**Item no.: 787-1102** Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 1.3 A output current; DC OK signal	www.wago.com/787-1102
	**Item no.: 787-1112** Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC OK signal	www.wago.com/787-1112
	**Item no.: 787-1122** Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 4 A output current; DC OK signal	www.wago.com/787-1122
	**Item no.: 787-1602** Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 1 A output current; NEC Class 2; DC OK signal	www.wago.com/787-1602
	**Item no.: 787-1606** Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 2 A output current; NEC Class 2; DC OK signal	www.wago.com/787-1606
	**Item no.: 787-1622** Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 5 A output current; TopBoost; DC OK contact	www.wago.com/787-1622
	**Item no.: 787-1632** Switched-mode power supply; Classic; 1-phase; 24 VDC output voltage; 10 A output current; TopBoost; DC OK contact	www.wago.com/787-1632
	**Item no.: 787-1702** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 1.25 A output current	www.wago.com/787-1702
	**Item no.: 787-1712** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current	www.wago.com/787-1712
	**Item no.: 787-1722** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current	www.wago.com/787-1722

transfer module

	**Item no.: 289-195** Interface module for ETHERNET RJ-45; for DIN 35 rail; with shield connection	www.wago.com/289-195

wiring and connectors

	**Item no.: 750-976** PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-976
	**Item no.: 750-977/000-011** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	www.wago.com/750-977/000-011
	**Item no.: 750-977/000-012** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22	www.wago.com/750-977/000-012
	**Item no.: 750-977/000-013** Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22	www.wago.com/750-977/000-013
	**Item no.: 750-977/000-021** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24	www.wago.com/750-977/000-021
	**Item no.: 750-977/000-022** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24	www.wago.com/750-977/000-022
	**Item no.: 750-978/000-011** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief	www.wago.com/750-978/000-011
	**Item no.: 750-978/000-012** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief	www.wago.com/750-978/000-012
	**Item no.: 750-978/000-013** Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief	www.wago.com/750-978/000-013
	**Item no.: 750-978/000-021** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief	www.wago.com/750-978/000-021
	**Item no.: 750-978/000-022** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief	www.wago.com/750-978/000-022
	**Item no.: 750-979/000-011** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief	www.wago.com/750-979/000-011
	**Item no.: 750-979/000-012** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief	www.wago.com/750-979/000-012

	**Item no.: 750-979/000-013** Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief	www.wago.com/750-979/000-013
	**Item no.: 750-979/000-021** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief	www.wago.com/750-979/000-021
	**Item no.: 750-979/000-022** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief	www.wago.com/750-979/000-022

Downloads

Documentation

Manual

16-Port 1000BASE-T Industrial Switch	Mar 29, 2017	1.3 MB	Download

Bid Text

852-1106	Nov 3, 2017	DOC 30.2 kB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download

System Description

Industrial Switches – General Product Information	Jun 6, 2017	514.9 kB	Download

smartDATA

CAD data

3D Download 852-1106	URL	Download

Subject to changes.

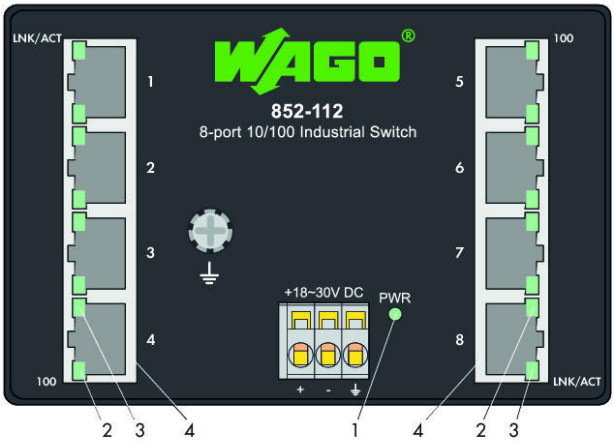
WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

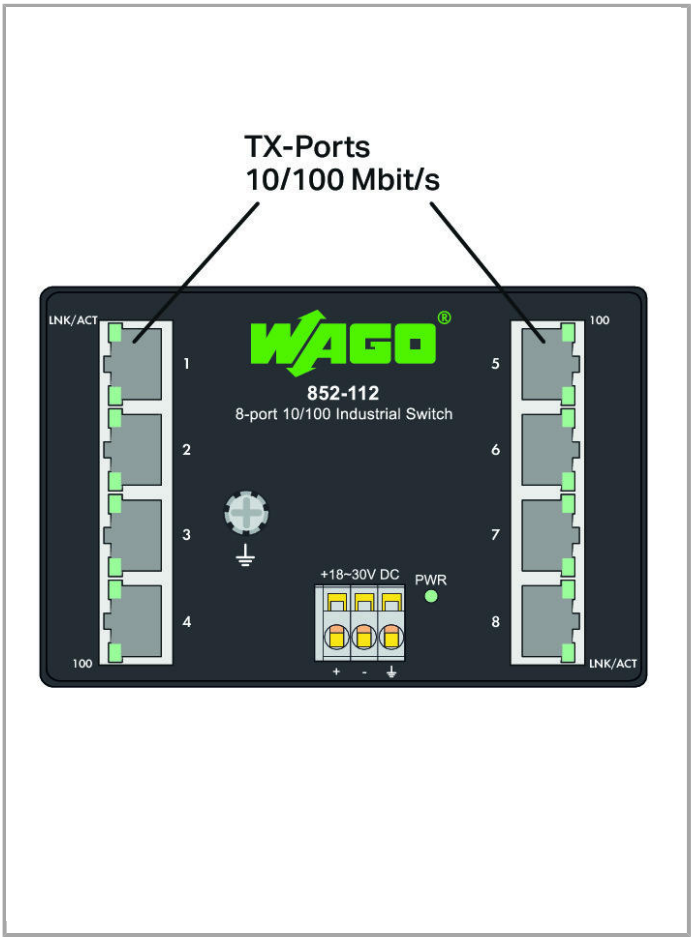
RoHS ✓ Compliant

BOMcheck.net

Color: ■



LED 1: Versorgungsspannung
LED 2: T-Port 100 Mbit/s
LED 3: LNK/ACT
4: 8 x RJ-45 (10/100BASE-TX-Ports)



Item description

The 852-112 is an 8-port 10/100Base-TX industrial ETHERNET switch supporting Auto-Negotiation and Auto-MDI-/MDI-X detection for each port.

The 852-112 is a cost-effective solution to keep up with the constant demands for emerging IP-based industry communication needs.

The switch is easy to configure and install and is best suited for small to medium-sized networks.

Features:

- 8 ETHERNET ports, 10/100 Mbps autonegotiation
- Front-panel diagnostic LEDs
- Supports Auto-MDI/MDI-X functions
- Full/half-duplex transfer modes for each port
- Store-and-forward switching method
- Integrated address look-up table, supports 2000 absolute MAC addresses
- Overvoltage protection
- IEEE 802.3x flow control in full-duplex mode
- DIN-35 rail mounting

Data

Technical Data

Switchingmodus	Store-and-forward, non-blocking
Number of 100Base-TX ports	8
Communication standards	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x Flow Control
MAC table (large)	2000 addresses
Jumbo frame size	1536 Byte
Supply voltage	DC 18 … 30 V
Energy consumption max.	3 W
Baud rate	Copper cable: 10/100Mbit/s
Übertragungsmedium (Kommunikation/Feldbus)	Copper cable: Cat. 5 or higher, 100 m maximum cable length
Topology	Star
Indicators	Device: LED (PWR) green: Power supply; per port: LED (100, LNK /ACT) green: status 100 Mbps, LNK/ACT port 1 … 8

Connection data

Anschlusstechnik: Kommunikation/Feldbus	Copper cable: 8 x RJ-45
Anschlusstechnik: Versorgung	1 x im Gerät verbaute Leiterplattenklemme: 739-103

Geometrical Data

Width	109.2 mm / 4.299 inch
Height from upper-edge of DIN-35 rail	32 mm / 1.26 inch
Depth	73.8 mm / 2.906 inch

Mechanical data

Weight	415 g
Color	black
Housing material	Sheet steel

Environmental Requirements

Surrounding air (operating) temperature	-40 … 70 °C
Surrounding air (storage) temperature	-40 … 80 °C
Degree of protection	IP30
Relative air humidity (no condensation)	95 %
Type of mounting	DIN-35 rail
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27

Commercial data

Country of origin	TW
GTIN	4045454847586
Customs Tariff No.	85176200000
Product Group	27 (Special components I/O)

Compatible products

power supply

	**Item no.: 787-1102** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 1.3 A output current; DC OK signal	www.wago.com/787-1102
	**Item no.: 787-1112** Switched-mode power supply; Compact; 1-phase; 24 VDC output voltage; 2.5 A output current; DC OK signal	www.wago.com/787-1112
	**Item no.: 787-1122** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 4 A output current; DC OK signal	www.wago.com/787-1122
	**Item no.: 787-1226** Switched-mode power supply; EPSITRON® COMPACT Power; 1-phase; 24 VDC output voltage; 6 A output current	www.wago.com/787-1226
	**Item no.: 787-1702** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 1.25 A output current	www.wago.com/787-1702
	**Item no.: 787-1712** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current	www.wago.com/787-1712
	**Item no.: 787-1722** Switched-mode power supply; Eco; 1-phase; 24 VDC output voltage; 5 A output current	www.wago.com/787-1722

transfer module

	**Item no.: 289-172** Interface module for ETHERNET RJ-45	www.wago.com/289-172
	**Item no.: 289-175** Interface module for ETHERNET RJ-45	www.wago.com/289-175
	**Item no.: 289-195** Interface module for ETHERNET RJ-45; for DIN 35 rail; with shield connection	www.wago.com/289-195
	**Item no.: 289-196** Interface module with RJ-45 connectors; CAGE CLAMP®CONNECTION; with LED; Fused	www.wago.com/289-196

wiring and connectors

	**Item no.: 750-975** ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-975
	**Item no.: 750-976** PROFINET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-976

	**Item no.: 750-977/000-011** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	www.wago.com/750-977/000-011
	**Item no.: 750-977/000-012** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22	www.wago.com/750-977/000-012
	**Item no.: 750-977/000-013** Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22	www.wago.com/750-977/000-013
	**Item no.: 750-977/000-021** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24	www.wago.com/750-977/000-021
	**Item no.: 750-977/000-022** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24	www.wago.com/750-977/000-022
	**Item no.: 750-978/000-011** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief	www.wago.com/750-978/000-011
	**Item no.: 750-978/000-012** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief	www.wago.com/750-978/000-012
	**Item no.: 750-978/000-013** Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief	www.wago.com/750-978/000-013
	**Item no.: 750-978/000-021** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief	www.wago.com/750-978/000-021
	**Item no.: 750-978/000-022** Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief	www.wago.com/750-978/000-022
	**Item no.: 750-979/000-011** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief	www.wago.com/750-979/000-011
	**Item no.: 750-979/000-012** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief	www.wago.com/750-979/000-012
	**Item no.: 750-979/000-013** Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief	www.wago.com/750-979/000-013
	**Item no.: 750-979/000-021** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief	www.wago.com/750-979/000-021
	**Item no.: 750-979/000-022** Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief	www.wago.com/750-979/000-022

Downloads

Documentation

Manual

8-Port 100BASE-TX Industrial ECO Switch	Aug 2, 2011	811.7 kB	Download

Bid Text

852-112 Switche	Jan 21, 2016	DOC 27.6 kB	Download

Instruction Leaflet

Operating and assembly instructions 852-111 / 852-112	May 8, 2014	PDF 1.7 MB	Download

Installation manual

Operating and assembly instructions 852-111 / 852-112	May 8, 2014	PDF 1.7 MB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download

System Description

Industrial Switches – General Product Information	Jun 6, 2017	514.9 kB	Download

smartDATA

CAD data

3D Download 852-112		URL	Download

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

20W Single Output Industrial DIN Rail Power Supply MDR-20 series

Features :

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- NEC class 2 / LPS compliant
- Built in DC OK active signal
- LED indicator for power on
- No load power consumption<0.75W
- 100% full load burn-in test
- 3 years warranty

SPECIFICATION

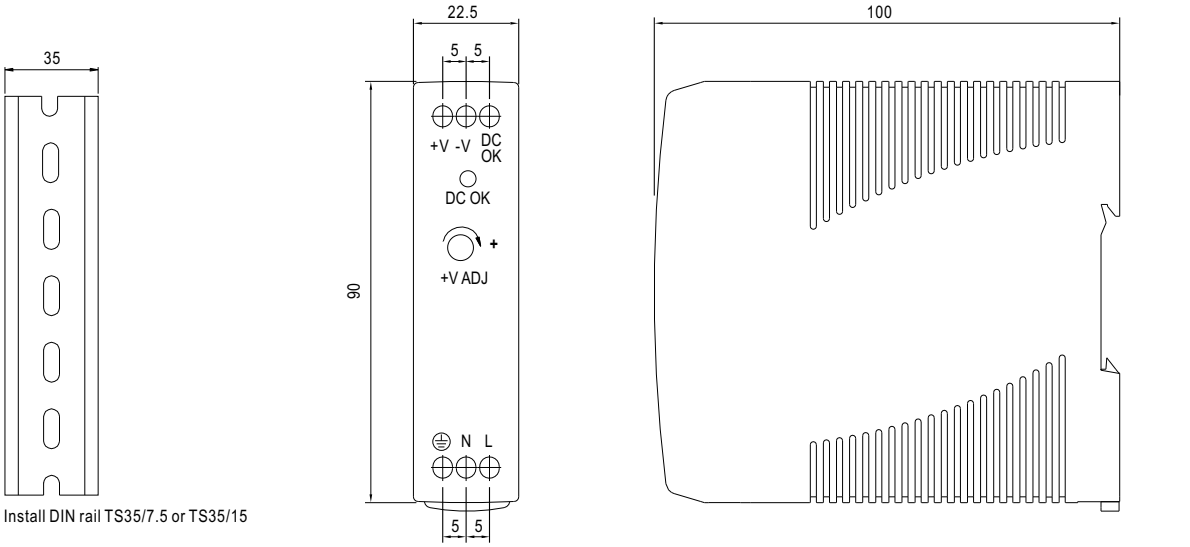
MODEL		MDR-20-5	MDR-20-12	MDR-20-15	MDR-20-24
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	3A	1.67A	1.34A	1A
	CURRENT RANGE	0 ~ 3A	0 ~ 1.67A	0 ~ 1.34A	0 ~ 1A
	RATED POWER	15W	20W	20W	24W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME Note.5	500ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load			
	HOLD UP TIME (Typ.)	50ms/230VAC 20ms/115VAC at full load			
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	76%	80%	81%	84%
	AC CURRENT (Typ.)	0.55A/115VAC 0.35A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC			
	LEAKAGE CURRENT	<1mA / 240VAC			
PROTECTION	OVERLOAD	105 ~ 160% rated output power			
		Protection type : Constant current limiting, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V
		Protection type : Shut down o/p voltage, re-power on to recover			
FUNCTION	DC OK ACTIVE SIGNAL (max.)	3.75 ~ 6V / 50mA	9 ~ 13.5V / 40mA	11.5 ~ 16.5V / 40mA	18 ~ 27V / 20mA
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL508, TUV EN60950-1 approved, NEC class 2 / LPS compliant			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC			
	EMI CONDUCTION & RADIATION	Compliance to EN55011,EN55022 (CISPR22), EN61204-3 Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3			
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024,EN61000-6-1,EN61204-3, light industry level, criteria A			
OTHERS	MTBF	236.9K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	22.5*90*100mm (W*H*D)			
	PACKING	0.19Kg; 72pcs/14.7Kg/0.91CUFT			

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
5. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

■ Mechanical Specification

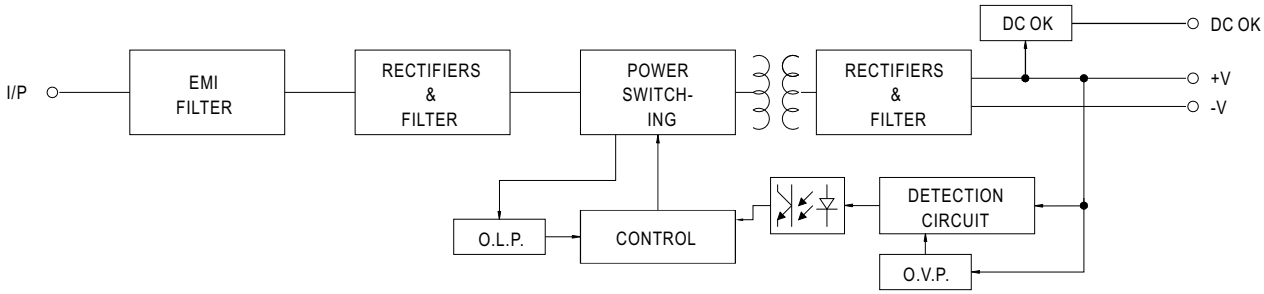
Case No. 956 Unit:mm



Install DIN rail TS35/7.5 or TS35/15

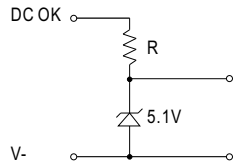
■ Block Diagram

fosc : 60KHz



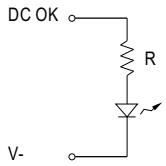
■ Application of DC OK Active Signal

(a) 5V signal



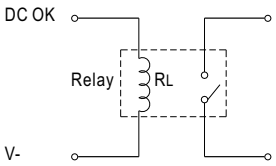
Model	R
5V	≧200Ω
12V	≧1.5KΩ
15V	≧2KΩ
24V	≧3.9KΩ

(b) LED



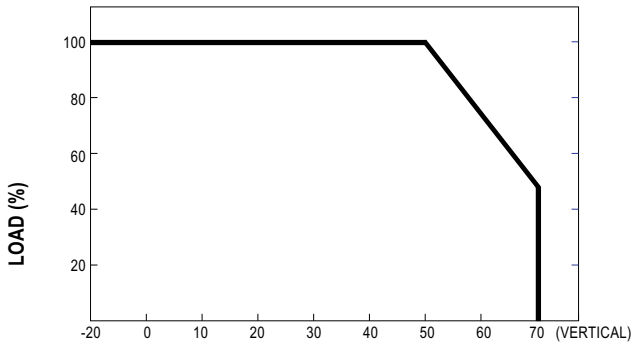
Model	R
5V	≧1KΩ
12V	≧2.4KΩ
15V	≧3KΩ
24V	≧4.7KΩ

(c) Relay



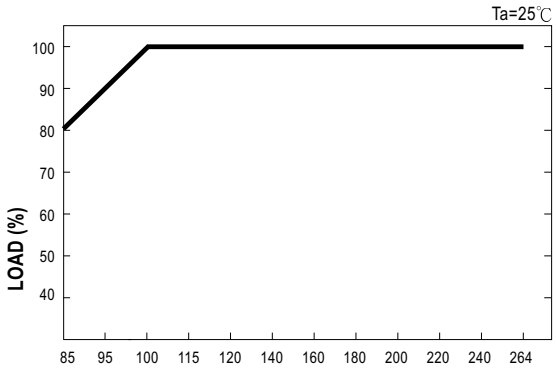
Model	RL
5V	≧120Ω
12V	≧700Ω
15V	≧700Ω
24V	≧1.2KΩ

■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz

MEAN WELL

75W Single Output Industrial DIN RAIL

NDR-75 series

Features

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- EN61000-6-2(EN50082-2) industrial immunity level
- 100% full load burn-in test
- 3 years warranty

Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

Description

NDR-75 is one economical slim 75W Din rail power supply series, adapt to be installed on TS-35/7.5 or TS-35/15 mounting rails. The body is designed 32mm in width, which allows space saving inside the cabinets. The entire series adopts the full range AC input from 90VAC to 264VAC and conforms to EN61000-3-2, the norm the European Union regulates for harmonic current.

NDR-75 is designed with metal housing that enhances the unit's power dissipation. With working efficiency up to 89%, the entire series can operate at the ambient temperature between -20℃ and 70℃ under air convection. It is equipped with constant current mode for over-load protection, fitting various inductive or capacitive applications. The complete protection functions and relevant certificates for industrial control apparatus (UL508, TUV EN60950-1, and etc.) make NDR-75 a very competitive power supply solution for industrial applications.

Model Encoding

NDR - 75 - 12

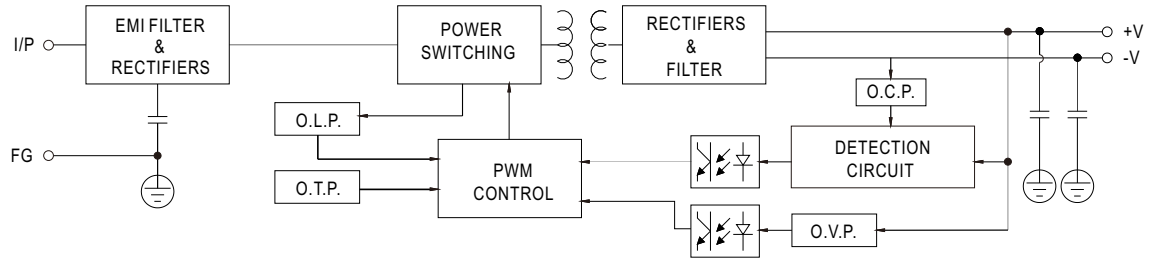
- 12 — Output voltage
- 75 — Output wattage
- NDR — Series name

SPECIFICATION

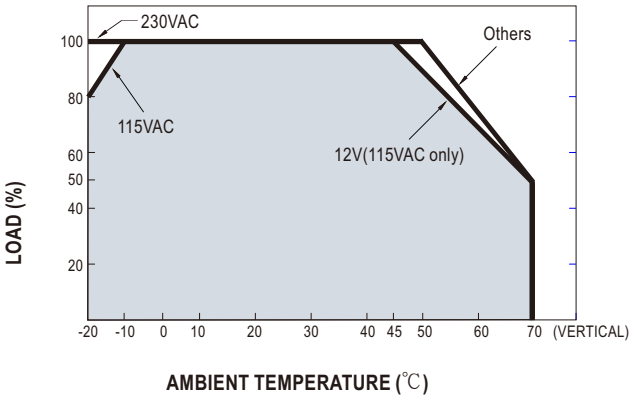
MODEL		NDR-75-12	NDR-75-24	NDR-75-48
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	6.3A	3.2A	1.6A
	CURRENT RANGE	0 ~ 6.3A	0 ~ 3.2A	0 ~ 1.6A
	RATED POWER	75.6W	76.8W	76.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 14V	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1200ms, 60ms/230VAC 2000ms, 60ms/115VAC at full load		
	HOLD UP TIME (Typ.)	60ms/230VAC 12ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC 127 ~ 370VDC [DC input operation possible by connecting AC/L(+), AC/N(-)]		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	85.5%	88%	89%
	AC CURRENT (Typ.)	1.45A/115VAC 0.9A/230VAC		
	INRUSH CURRENT (Typ.)	20A/115VAC 35A/230VAC		
	LEAKAGE CURRENT	<1mA / 240VAC		
PROTECTION	OVERLOAD	105 ~ 130% rated output power		
		Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	14 ~ 17V	29 ~ 33V	56 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-20 ~ +70℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 95% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)		
	VIBRATION	Component:10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6		
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UI508, TUV EN60950-1 approved;(meet EN60204-1)		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to EN55032 (CISPR32), EN61204-3 Class B, EN61000-3-2,-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2 (EN50082-2), EN61204-3, heavy industry level, criteria A		
OTHERS	MTBF	486.2K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	32*125.2*102mm (W*H*D)		
	PACKING	0.51Kg; 28pcs/15.3Kg/1.22CUFT		
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Installation clearances : 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended. 6. Derating may be needed under low input voltage. Please check the derating curve for more details.			

Block Diagram

fosc : 85KHz

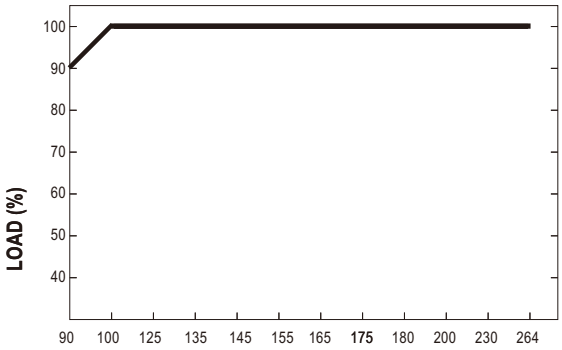


Derating Curve



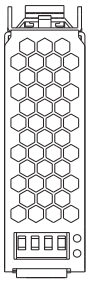
AMBIENT TEMPERATURE (℃)

Static Characteristics



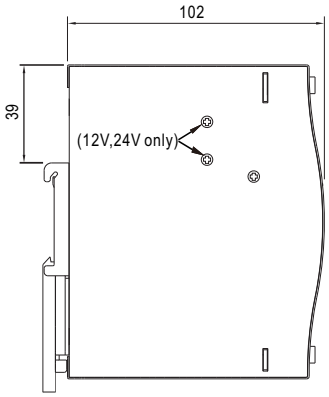
INPUT VOLTAGE (V) 60Hz

■ Mechanical Specification

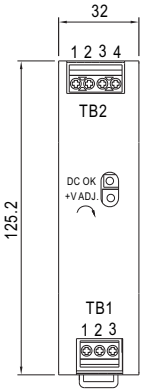


Top View

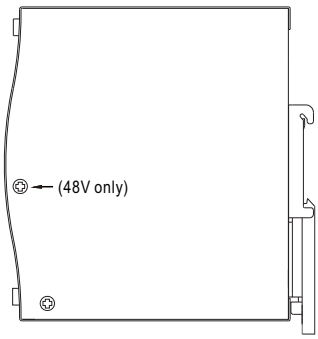
Case No.221B Unit:mm



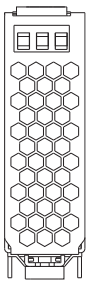
Side View



Front View



Side View



Bottom View

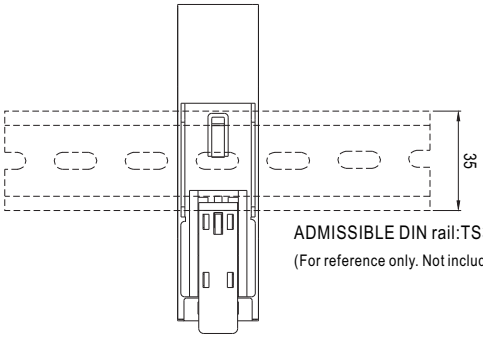
Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	FG ⏚
2	AC/N or DC -
3	AC/L or DC +

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1,2	DC OUTPUT -V
3,4	DC OUTPUT+V

■ Installation Instruction



ADMISSIBLE DIN rail:TS35/7.5 OR TS35/15
(For reference only. Not included with unit.)

Back View

This series fits DIN rail TS35/7.5 or TS35/15.
For installation details, please refer to the Instruction manual.

■ Installation Manual

Please refer to : http://www.meanwell.com/manual.html

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

Primary-switched UNO POWER power supply for DIN rail mounting, input: 1-phase, output: 12 V DC/30 W

Product Description

UNO POWER power supplies with basic functionality
Thanks to their high power density, compact UNO POWER power supplies are the ideal solution for loads up to 240 W, particularly in compact control boxes. The power supply units are available in various performance classes and overall widths. Their high degree of efficiency and low idling losses ensure a high level of energy efficiency.

Your advantages

- Flexible mounting by simply snapping onto the DIN rail
- More space in the control cabinet with up to 20 % higher power density
- Maximum energy efficiency, thanks to over 90 % efficiency and extremely low idling losses under 0.3 W
- Outdoor installation, thanks to the wide temperature range from -25°C to +70°C

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 728812
GTIN	4046356728812
Weight per Piece (excluding packing)	178.200 g
Custom tariff number	85044030
Country of origin	Poland

Technical data

Dimensions

Width	22.5 mm
Height	90 mm
Depth	84 mm

Ambient conditions

Degree of protection	IP20

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (> 55 °C Derating: 2.5 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2

Input data

Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	85 V AC ... 264 V AC
Current consumption	0.8 A (100 V AC)
	0.4 A (240 V AC)
Nominal power consumption	71.7 VA
Inrush surge current	< 25 A (typical)
Mains buffering	typ. 20 ms (120 V AC)
	typ. 110 ms (230 V AC)
Input fuse	2 A (slow-blow, internal)
Choice of suitable circuit breakers	6 A ... 16 A (Characteristics B, C, D, K)
Power factor (cos phi)	0.48
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

Nominal output voltage	12 V DC ±1 %
Nominal output current (I_N)	2.5 A (-25 °C ... 55 °C)
Derating	55 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	yes
Feedback resistance	< 25 V DC
Protection against surge voltage on the output	≤ 25 V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (Dynamic load change 10 % ... 90 %, 10 Hz)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 30 mV_{PP} (with nominal values)
Output power	30 W
Typical response time	< 1 s
Maximum power dissipation in no-load condition	< 0.3 W
Power loss nominal load max.	< 4.6 W

General

Net weight	0.15 kg
Efficiency	typ. 86 % (120 V AC)
	typ. 87 % (230 V AC)

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Technical data

General

Insulation voltage input/output	4 kV AC (type test)
	3 kV AC (routine test)
Protection class	II (in closed control cabinet)
Degree of protection	IP20
MTBF (IEC 61709, SN 29500)	> 953000 h (40 °C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: 0 mm horizontally, 30 mm vertically

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	8 mm
Screw thread	M3

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
Contact discharge	4 kV (Test Level 2)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m
Frequency range	1.4 GHz ... 2 GHz
Test field strength	3 V/m
Standards/regulations	EN 61000-4-4

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Technical data

Standards and Regulations

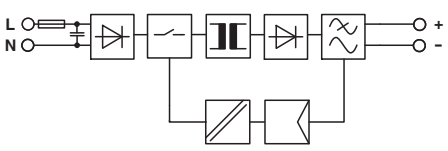
Comments	Criterion B
Standards/regulations	EN 61000-6-3
	EN 61000-4-6
Frequency range	10 kHz ... 80 MHz
Voltage	10 V (Test Level 3)
Standards/regulations	EN 61000-4-11
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Safety of transformers	EN 61558-2-16
Standard - Electrical safety	IEC 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Safety extra-low voltage	IEC 60950-1 (SELV) and EN 60204-1 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard – Limitation of mains harmonic currents	EN 61000-3-2
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1
	UL/C-UL Listed ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g, 90 min.
Approval - requirement of the semiconductor industry with regard to mains voltage dips	EN 61000-4-11
Information technology equipment - safety (CB scheme)	CB Scheme

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Block diagram



Classifications

eCl@ss

eCl@ss 4.0	27040702

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Classifications

eCl@ss

eCl@ss 4.1	27040702
eCl@ss 5.0	27049002
eCl@ss 5.1	27049000
eCl@ss 6.0	27049000
eCl@ss 7.0	27049002
eCl@ss 8.0	27049002
eCl@ss 9.0	27040701

ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002540
ETIM 6.0	EC002540

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

Approvals

Approvals

Approvals

UL Listed / UL Recognized / cUL Recognized / IECEE CB Scheme / cUL Listed / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 214596

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 214596
IECEE CB Scheme		http://www.iecee.org/	DK-30305-A3-M1-UL
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
EAC			EAC-Zulassung
EAC			RU C-DE.A*30.B.01082
cULus Recognized			
cULus Listed			

Accessories

Accessories

Device circuit breakers

Electronic device circuit breaker - CBMC E4 24DC/1-4A NO - 2906031

Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Power supply unit - UNO-PS/1AC/12DC/ 30W - 2902998

Accessories

Electronic device circuit breaker - CBMC E4 24DC/1-10A NO - 2906032

Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Device protection

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919

Type 2/3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 230 V AC/DC.

Type 3 surge protection device - PLT-SEC-T3-24-FM-UT - 2907916

Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Redundancy module

Redundancy module - UNO-DIODE/5-24DC/2X10/1X20 - 2905489

Redundancy module, 5 V - 24 V DC, 2 x 10 A, 1 x 20 A.