



Product brochure

ABB Fusegear

SlimLine XR

Switch Disconnecter Fuse, 63-630A

Power and productivity
for a better world™



SlimLine

Fuse protection

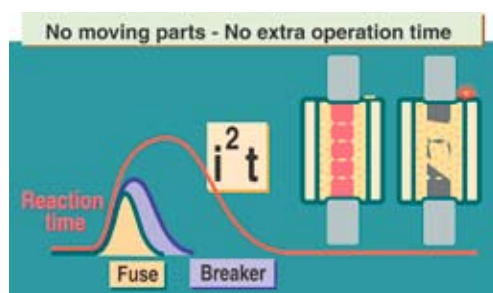
Fuse protection – Easy and reliable

The fuse is a superior short circuit protection element regarding the maximum allowed cut-off current (peak let through current) and energy value. This is more important the higher the voltage and prospective fault levels are. The SlimLine switch disconnecter fuse fulfil the highest requirements for modern switch fuses with a total safety concept. The switch fuses are tested according to the EN 60947-3 standard with more stringent requirements for isolation, making, performance and safety. The fuse rails are tested according to IEC 60269-2-1.

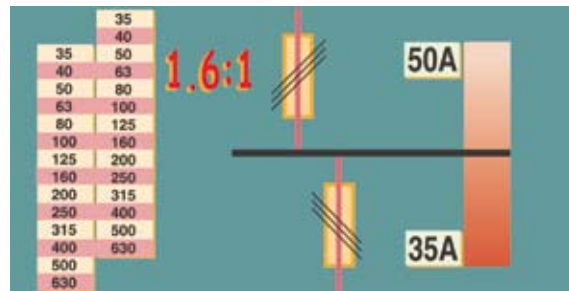
The melting curves and current limiting diagrams for NH fuse links are given in the IEC 269-2 standard. The standardised fuse characteristics and high degree of current limitation ensure that there is a simple and effective co-ordination with fuse links and other devices.

Fuse links provide a simple procedure for selecting the right fuse type for your installation, without complicated calculations or calculation tools. Fuses prevent “blackouts”. Only the fuse nearest a fault trips without upstream fuses (feeders or mins) being affected. Fuses thus provide selective coordination.

When more power is needed in an installation, more feeders can be added without changing the present structure or any new selectivity calculations. Fuse links will assure selectivity in the installation by 1,6:1 difference in the rated current.



No moving parts
– **No extra operation time**



No need for calculation tools
– **Easy and economical selectivity**

Economical installation

Lifetime costs of fuse systems are low. Fuse links which can withstand a high fault level and a fault current, are available at economical prices. After fuse operation, only the fuse link has to be changed. Because the fuse links can be rapidly and easily replaced, plant down time and maintenance are substantially reduced with a fuse link system.

Because the fusing elements operate in a cylinder, they are not affected by their surroundings. Thus their protecting characteristics remain stable year after year. The dynamic stress on the network and its equipment is dependent of the let through energy ($i^2 t$) at a short circuit. The fuse link provides the best protection compared to other solutions, at high short circuit currents. As the fuse link body is filled with quartz sand, there will be no emission of gases or arcs when a short circuit occurs. This again leads to less stress on the network and a higher degree of personal safety.

Fuse protection – Easy and reliable

- Economical installation
- Easy and economical selectivity
- No need for calculation tools
- No need to change the present structure when more power is needed
- No moving parts
- No extra operation time
- No arc space
- No emission of gasses at short circuits

SlimLine

Switch Disconnecter Fuse

Type XR

63 - 630A DIN/BS

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SlimLine XR Switch Disconnecter Fuse													
Type	Size	XRE		XRE-4P	XRM		XRM-DC		XRM-BS		XRE-BS-4P	XRM-BS-DC	
Rated operational voltage U _e (V)		500	690	500	500	690	230	500	500	690	500	230	500
Rated operational current I _e (A)	00	160	125	160	160	125	125	160	63,100 160	125	160	125	160
	1	250	250	250	250	250	250	250	250	250	250	250	250
	2	400	400	400	400	400	400	315	400	400	400	400	315
	3	630	500	630	630	500	630	400	630	500	630	630	400
Rated insulation voltage U _i (V)		1000		1000	1000		1000		1000		1000	1000	
Rated impulse withstand voltage U _{imp} (V)		8000		8000	8000		8000		8000		8000	8000	
Fuse protected short circuit making (kArms)		55		55	66		66 ¹⁾		66		55	66 ¹⁾	
Fuse protected short circuit making (kArms). Personal safe, welded contacts allowed		100		100	100		100 ¹⁾		100		100	100 ¹⁾	
Fuse protected short circuit withstand (kArms)		100		100	100		100 ¹⁾		100		100	100 ¹⁾	
Rated making and breaking capacity :		AC22B		AC22B	AC23B		DC23B	DC21B	AC23B		AC22B	DC23B	DC21B
Rated frequency (Hz)		50/60		50/60	50/60		-		50/60		50/60	-	
Durability: Total / With current	00 / 1	1600 / 200		1600 / 200	1600 / 200		1600 / 200		1600 / 200		1600 / 200	1600 / 200	
	2 / 3	1000 / 200		1000 / 200	1000 / 200		1000 / 200		1000 / 200		1000 / 200	1000 / 200	
	BS63 / BS100								2000 / 300		2000 / 300	2000 / 300	
Degree of protection from the frontacc. to IEC / EN 60529		IP 41		IP 41	IP 41		IP 41		IP 41		IP 41	IP 41	

Typetested according to IEC 60947-3

1) Tests run at AC

Powerlosses in SlimLine XR

Size	00	1	2	3
Rated current (A)	160	250	400	630
XRE/M NCT (W)	-	-	112	293
XRE/M (W)	43	78	158	357

The values given include all three phases, but without fuses.

Type of Fuses for XRM BS versions

Current	Fuse Type	Current	Fuse Type	Current	Fuse Type
63 A	A3	250 A	B2	400 A	B4
100 A	A3			630 A	3T Lawson
160 A	00T Lawson				

SlimLine

2. General

SlimLine XR presentation

XR is the new generation switch disconnecter fuse from ABB. ABB has a long history in producing these types of devices, and the first generation was introduced already in 1977.

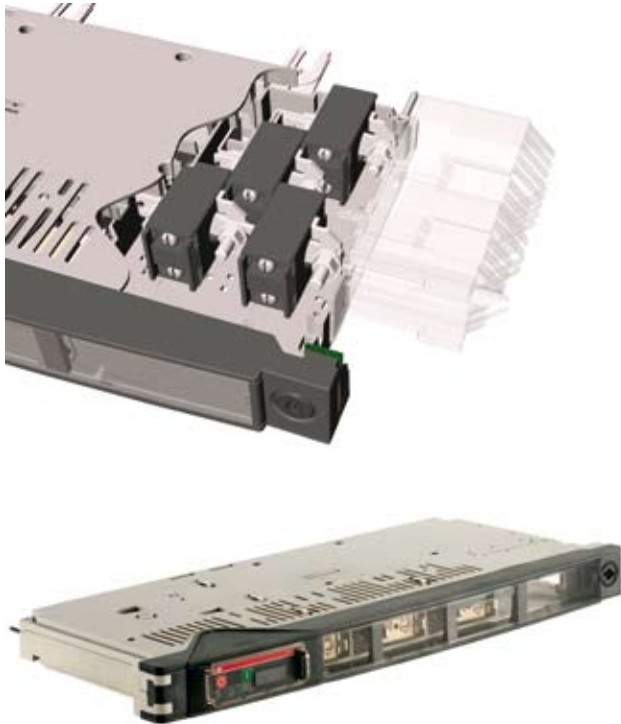
Areas of applications:

- Motor Control Centers
- Distribution boards
- in building industry, shipping and oil and gas industries.



SlimLine

2. General



Advantages

- **Retrofittable integrated 3 phase CT's even up to 4 CT's**
- **Integrated Motor operation (MOT)**
- **Intelligent Tier Switch (ITS) for local and remote monitoring**
- **Electronic Fuse Monitoring (EFM)**
- **Easy access to Multiplug for all external auxiliary wiring**
- **Integrated guide rails for safe and easy installation**
- **Space for cabling up to 2 x 300 mm² at XR 2/3**
- **Compact design => space saving => total cost saving.**



Properties

- Modular design
- Developed for plug-in switchboard systems
- Plug in / out from live busbars under voltage
- 3 / 4 pole AC and 2 pole DC version
- Maintenance free
- High degree of personal safety, IP 41
- Available for depth of 200 mm or 400 mm

Available XR versions:

XRE



Switch fuse disconnecter for DIN NH fuse links.

- AC22B at 690 V
- Interruption on both sides of the fuses.

XRM

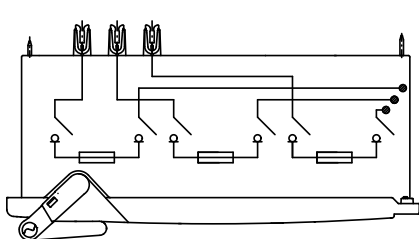


Switch fuse disconnecter for DIN NH and BS 88 fuse links.

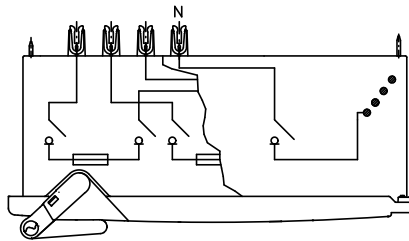
- AC23B at 690 V
- Interruption on both sides of the fuses.

XR is available for the following busbar phase distances

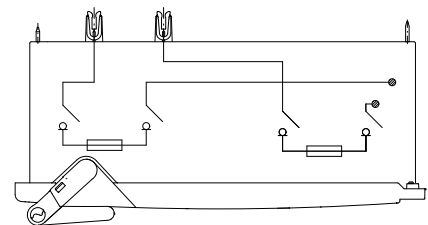
50 mm distance between phases, 5 mm busbar



3 - pole

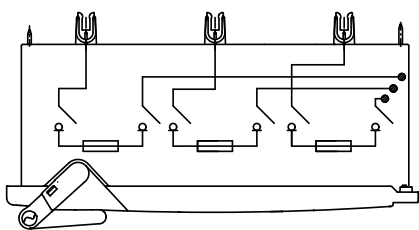


4 - pole

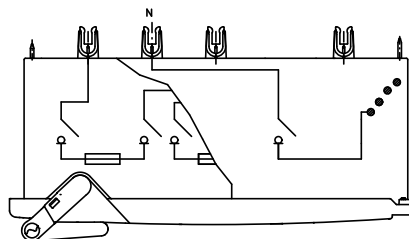


2 pole DC

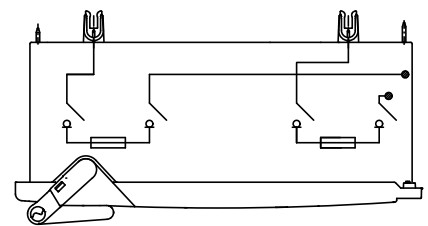
185 mm distance between phases, 10 mm busbar



3 - pole



4 - pole



2 - pole DC

4 Pole version

- The 4th pole neutral switch (N) is located at the top of XRE 3-pole unit.
- The neutral switch is fully rated.
- The neutral switch is switched "First in" and "Last out".
- Common cable shroud for the 4th pole (N) for all sizes.

2 Pole DC version

- The XRM DC is rated up to 500 V DC



XR 4 pole

3. Apparatus overview

DIN version:

XR00 160 A



BS version:

XR 63 A, 100 A, 160 A

XR1 250 A

XR 250 A

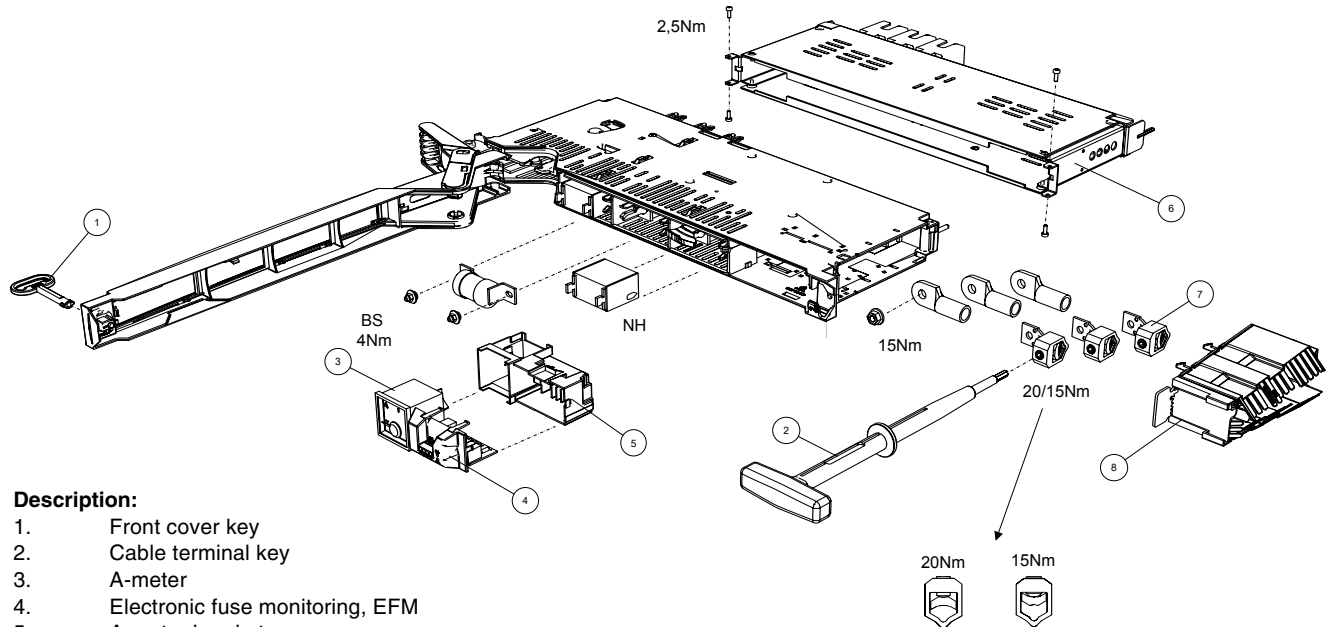


XR2 400 A
XR3 630 A

XR 400 A
XR 630 A

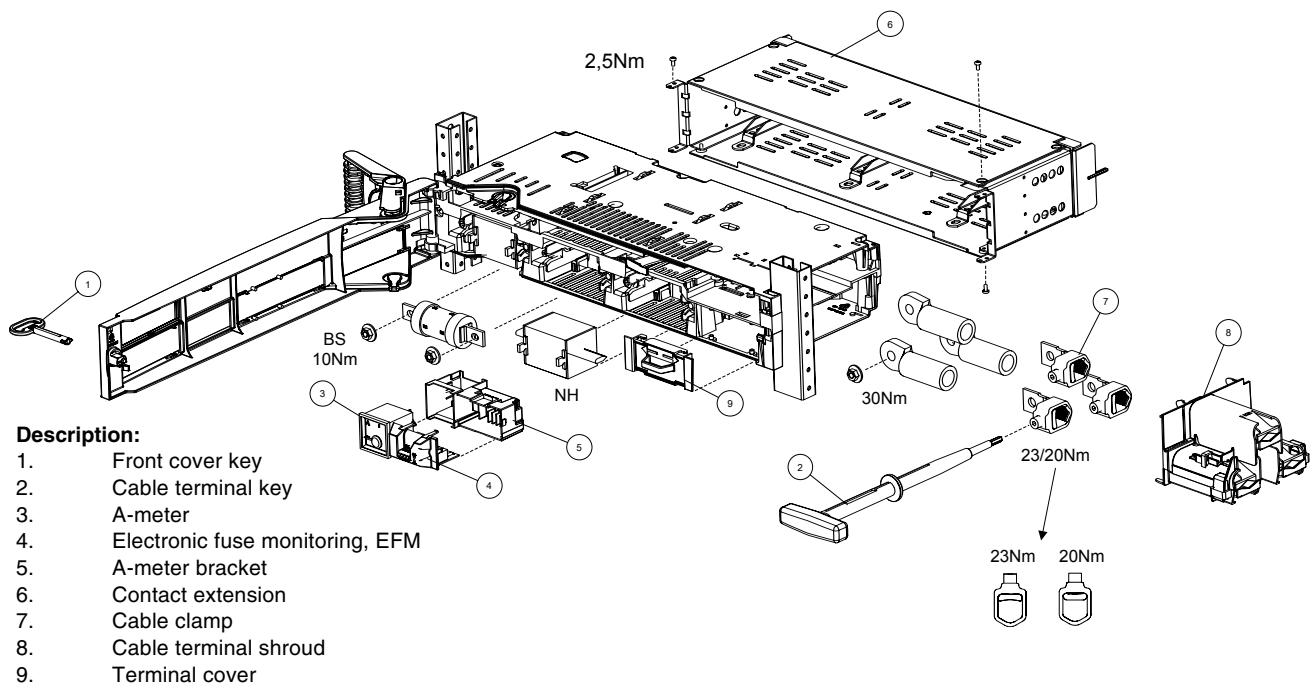


Assembly XR00, 160 A

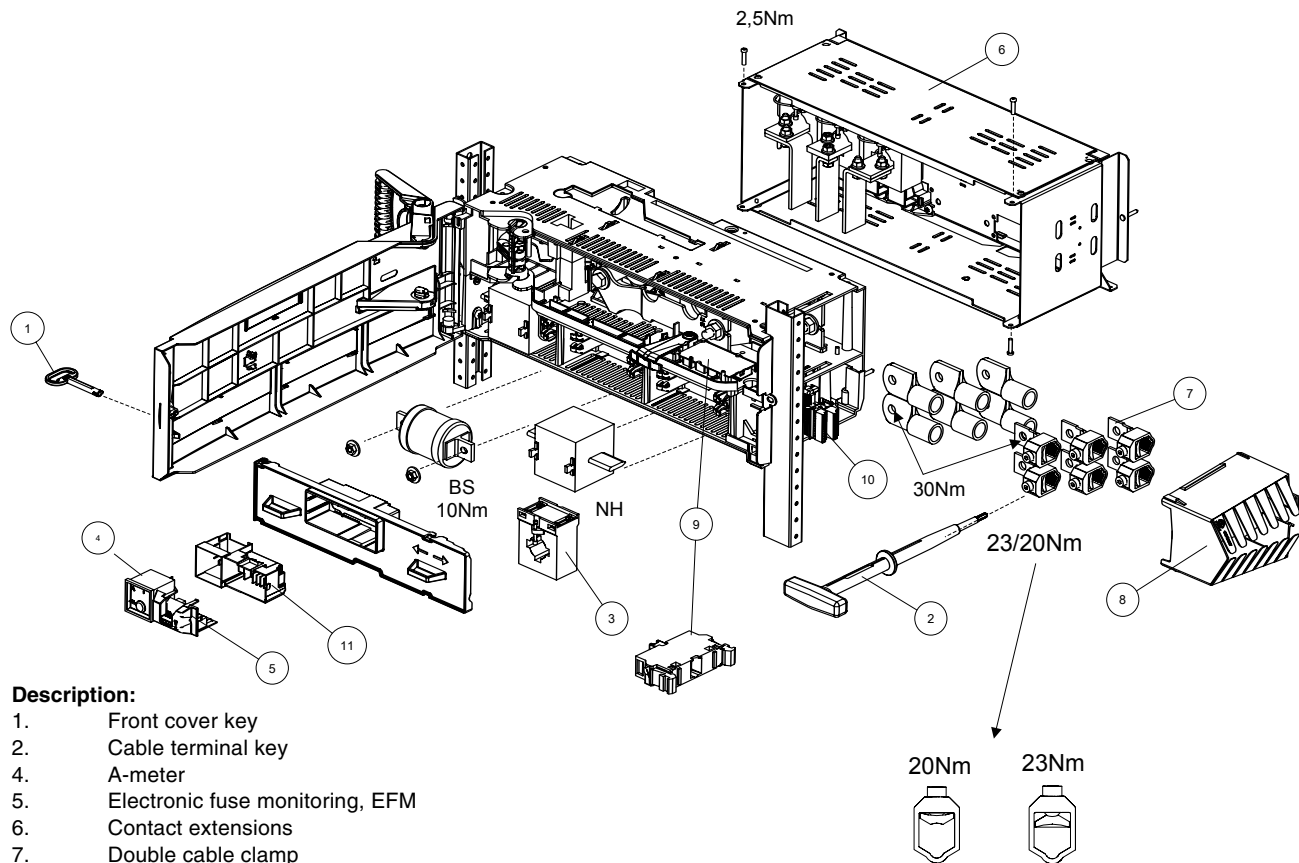


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Assembly XR1, 250 A

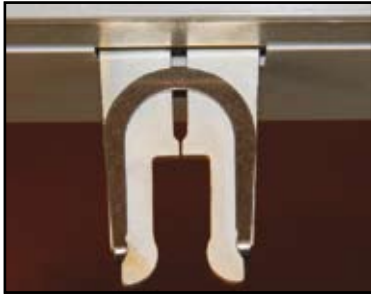


Assembly XR2/3, 400-630 A



Description:

1. Front cover key
2. Cable terminal key
4. A-meter
5. Electronic fuse monitoring, EFM
6. Contact extensions
7. Double cable clamp
8. Cable terminal shroud
9. Auxiliary switch
10. Multi plugs
11. A-meter bracket



Installation and operation

Plug-in contacts - Fast, easy and safe

Years of experience and development are put into the plug-in contacts used in the XR. Basis for the technology is that the current floats in small spots within the apparent contact point. These spots are named "effective contact areas". A spring loaded contact achieves a high contact force. This again leads to a high "effective contact" area.

The design of the contact will increase the closing force if a short circuit appears. The use of plug-in contacts at distribution busbars will give easier and faster installation.

Installation

Slide the SlimLine apparatus into the panel until the guide pins fits into the rear profiles and the contact fingers are connected to the busbars. The integrated guide rails will ensure safe, fast and easy installation.

Operation

The XR is operated by moving the operation handle sideways, approx. 90° degr.

The handle can be folded in both "On" and "Off" position.

The true ON / OFF position is shown by the switch indicator in front.

Padlocking the XR

The folded operating handle can be padlocked in OFF position by use of padlocks with shackle Ø 6 mm.

Voltage testing

In the case of voltage testing directly on the live fuses the transparent front window may be opened by using a screw driver to release at the right side of the window.

Replacement of the NH fuses in the XR

How to replace NH fuses in a XR 00 that is placed between other XR apparatus in ON position.



Switch OFF the XR where the NH fuses shall be replaced and open the frontcover.



The operating handles of the XR's placed above and below can be released by use of a screwdriver and moved to park-position with the XR's still in ON position.



With the operating handles above and below in park-position, there is easy access to the L1 fuse in the XR in the middle.



By use of a NH replacement tool, the NH fuses in the XR 00 in the middle can easily be removed / replaced.

All operating handles at XR 00,1,2 and 3 can be placed into park-position.

SlimLine XR - Motor operation (MOT)

SlimLine XR offers an integrated motor for remote or local operation. The motor operation unit is 100% integrated without any changes of external dimensions.

The front operated ON / OFF buttons is shrouded by a transparent cover with padlocking facility.



- The XR MOT is factory fitted for all XR sizes.
- The motor unit is 100% integrated in the XR.
- The front operated buttons are protected by a transparent front cover with padlock facility.
- Local or remote operation.
- Prepared for manual emergency operation from the front in case of lost power supply.
- External wiring via the multiplug 8 kit, which is factory fitted.

Motor Multiplug	
1	Field Open (OFF)
2	Field Close (ON)
3	
4	
5	
6	
7	Neutral
8	+ 24 VDC

Technical data:	XR00 MOT	XR1 MOT	XR2/3 MOT
Operational voltage:	24 V DC ± 2 Volt		
Operational consumption peak value:	1,1 A	1,3 A	2,8 A
Signal duration:	Min. 0,5 sec. or permanent		
Minimum number of operations according to IEC 60947-3			

XR ITS monitoring via ModBus



Intelligent Tier Switch (ITS)

SlimLine XR can be delivered as an Intelligent Tier Switch (ITS) for remote operation and monitoring using Bus communication. All parameters of setting alarm levels can be done via a laptop connected to each SlimLine XR ITS via a USB cable.

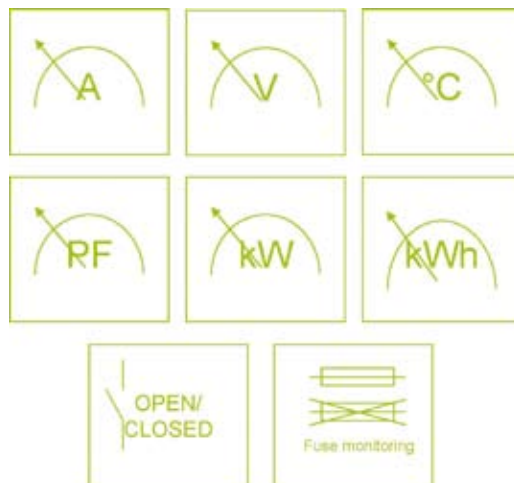
All the ITS data can be delivered for direct remote monitoring via Modbus RTU from the internal Multiplug at the right hand side of the XR.



SlimLine XR ITS is an XR with built in current, voltage and temperature sensors.

The XR ITS measures the following:

- Current per phase
- Voltage
- Power
- Power consumption (kWh)
- Power factor
- Temperature



The XR ITS monitor the following:

- Fuse status
- Switch position

Based on these data the XR ITS can create alarms if fuses are blown or temperature or currents exceeds the limits configured in the ITS box.

XR ITS monitoring via ModBus



The settings in the XR ITS is done by the ITS software used in a PC linked by an USB cable to the ITS display box. The software is included when ordering XR ITS. The settings can be stored in the software for easy copy and paste into each XR ITS in the switchboard.

Measurement Accuracy	
Energy Metering	Class S1 meter (1% of displayed value)
Current Measurement	Better than 1% of displayed value
Voltage Measurement	Better than 1% of displayed value
Temperature Measurement	$\pm 1^{\circ}\text{C}$

Power requirements	
Supply voltage	18 - 30 V DC (typ. 24 V DC)
Power consumption	5 W @ 24 V DC

EMC	
EMC	According to IEC 60947-2 Annex J and F
ESD	IEC 61000-4-2
RF Field	IEC 61000-4-3
Fast transients/burst	IEC 61000-4-4
Surges	IEC 61000-4-5
Induced RFI	IEC 61000-4-6
Emission RF	CICPR 11 / CICPR 22

Environmental Data	
Environmental	According to IEC 60947-2 Annex J and F
Operational ambient temp.	-25 to +55°C
Storage and transport temp.	-40 to +70°C
Dry heat	-40°C, 168 h
Damp heat	IEC 60068-2-30 (upper temp. +55°C, 6 cycles)
Temeraure cycling	IEC 60068-2-14 (-25 to +55°C, 28 cycles)

SlimLine XR - Electronic Fuse Monitoring (EFM)

The SlimLine XR EFM gives an alarm if any fault conditions if a fuse is blown.

An internal potential free relay (1 NC + 1 NO) will trip to transmit a signal for a remote fuse blown alarm. The EFM unit is self supplied, which means no additional power supply is required.



- The green LED in the front panel indicates all fuses OK.
- The red LED will turn on if one or more fuses are blown.

The EFM will automatically be reset after the blown fuse has been replaced, and the green LED will switch on again.

The XR with EFM is delivered from the factory with Multiplug 8 included for external wiring.

The matrix below show all possible cases of indication

Fuse status			Relay contacts			
	Green LED	Red LED	NO contact 3, 4		NC contact 5, 6	
			Open	Closed	Open	Closed
1. XR in ON position						
Fuses OK	★	●	X			X
Fuses BLOWN	●	★		X	X	
2. XR in OFF position						
Fuses OK	●	●	X			X
Fuses BLOWN	●	●	X			X

Power supply to the EFM unit from phase L2 and L3

EFM Technical data	
Minimum operation voltage	340 V
Maximum operation voltage	770 V
Uimp over a blown fuse	12,3 kV
Uimp between phases	9,8 kV
Uimp between main circuit / relay contacts	9,8 kV
Dielectric test voltage input / output	3,5 kV / 50 Hz / 1 minute
Electrostatic Discharge	EN 61000-4-2 ± 4 kV
Electrical Fast Transient	EN 61000-4-4 ± 2 kV
Conducted Fast transient	EN 61000-4-6 10Vrms /150kHz - 80MHz
MTBF	1.103.137 hours at 80°C
Recommended cable size	AWG 22 - 12 / 0,2 - 2,5 mm ²
EFM Relay	
Nominal current	8 A
Maximum switching voltage	250V AC; 24V DC

EFM Multiplug	
1	
2	
3	Aux. Relais NO
4	Aux. Relais NO
5	Aux. Relais NC
6	Aux. Relais NC
7	
8	

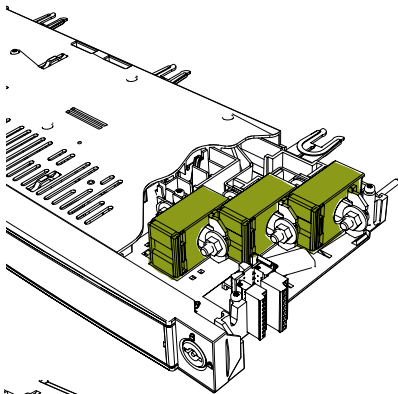
Current metering 1 phase or 3 phase

Current transformer

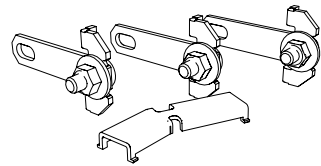
In all the XR's it is possible to install current transformers for 1 or 3 phases.

By using 3 CT's intergated in the XR apparatus body, it is possible to monitor kW and kWh by connection to a remote kWh meter. It is also possible to install even a 4'th CT, still totally integrated within the body of the XR.

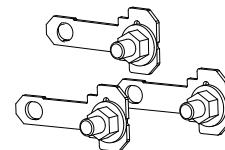
As an option, the CT's can also be installed in the contact extension. Plese study the complete overview at page 37 and 38.



XR00 terminal extensions for CT's has to be ordered separately.

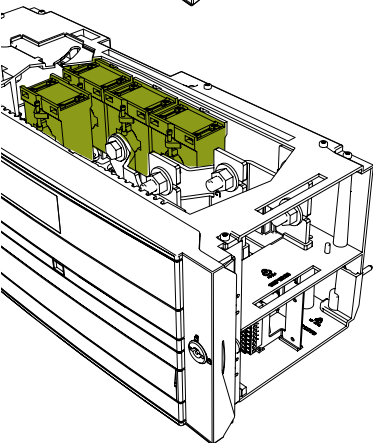


XR1 terminal extensions for CT's has to be ordered separately.



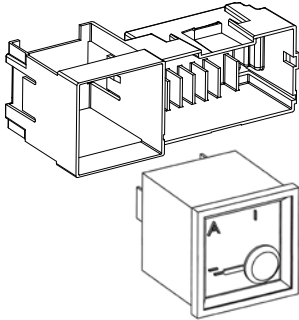
XR2/3 has integrated extensions from the factory prepared for the CT's.

XR2/3 NCT (No CT) is a price optimized variant not prepared for CT installation.



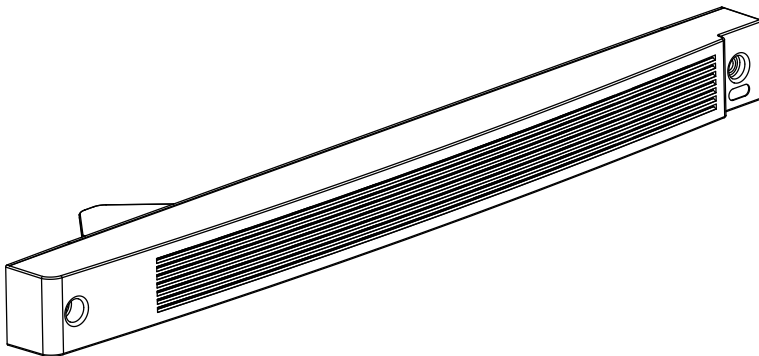
Ammeter

Ammeter DIN 48x48 with maximum indication may be fitted into each XR.
An additional ammeter bracket 1SEP408519R0001 is required for all XR sizes.



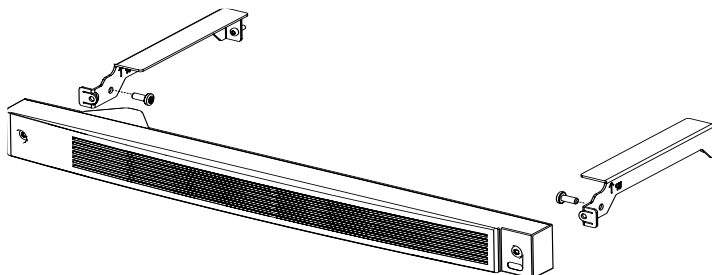
Ventilated blind cover

The blind cover is 50 mm high. The ventilation ribs give an IP41 protection degree. The kit include fixing brackets and screws.



Guide rails

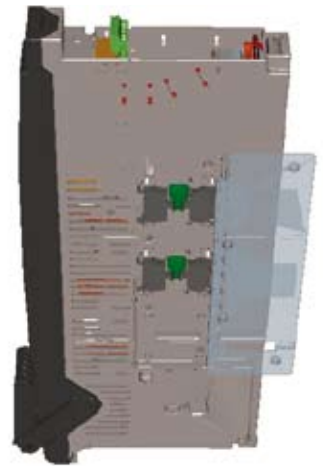
The guide rails can be integrated in the switchboard to support the installation of the XR apparatus first installed at the bottom side of the switchboard. The ventilated blind cover can be fixed directly to the front fixing brackets. (To be ordered separately).



Auxiliary contacts

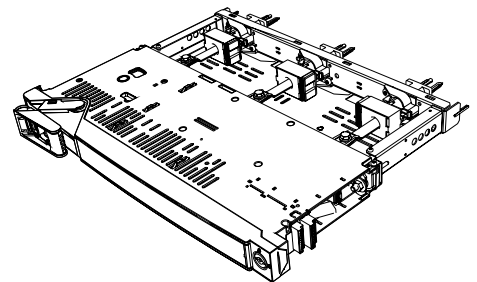
From 1 up to 4 pcs NO or NC auxiliary contacts can be installed in the XR. The first NO or NC auxiliary switch can be ordered as a kit including screws needed and protection shroud. Multiplug is not included.

Auxiliary no 2,3,4 can be ordered as single auxiliary switches. The wiring is done via the multiplug.



Contact extension

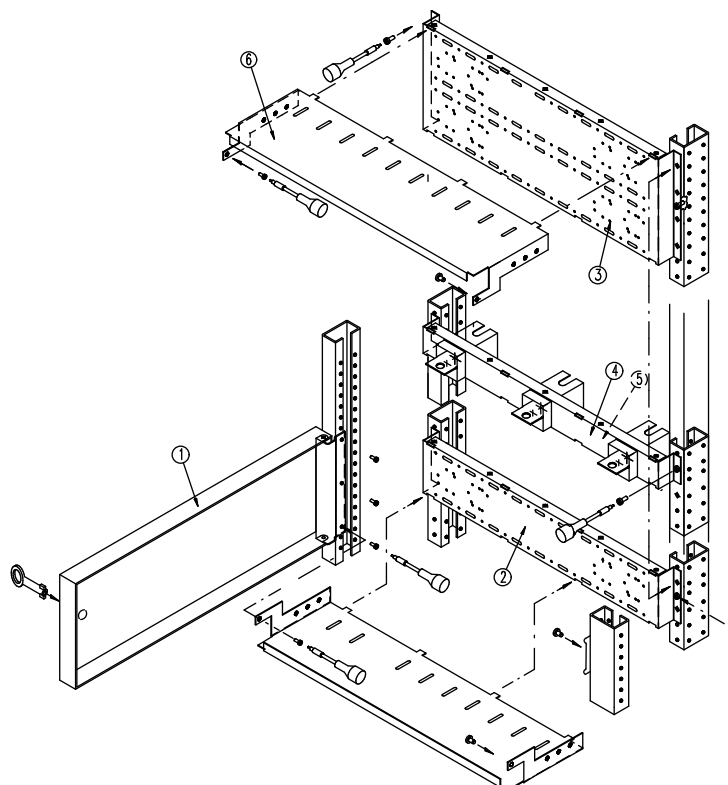
The contact extension is an adapter to be used in special applications when the total depth from the front of the switchboard to the busbars is 400 mm. For example in combination with motor control centres. Standard depth of an XR apparatus is 200 mm. The contact extension is available for 50 mm and 185 mm busbar distances, 3 pole, 4 pole and 2 pole DC.



Service module

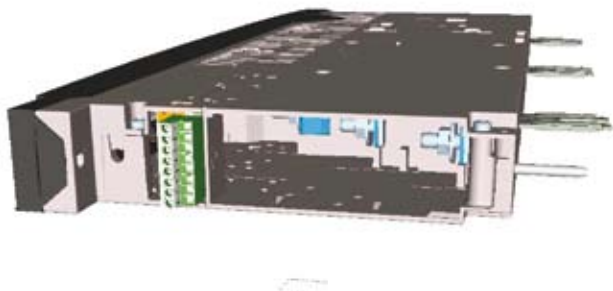
The service module allows you to create a separate installation e.g. contactors, MCBs etc. within the SlimLine cassette.

1. Front door delivered with hinges and lock
H: 100,200,300,400
- 2/3. Assembly plate, predrilled, H: 100 – 400mm
4. Busbar connection module 400A 185mm
6. Segregation plates 2 pcs



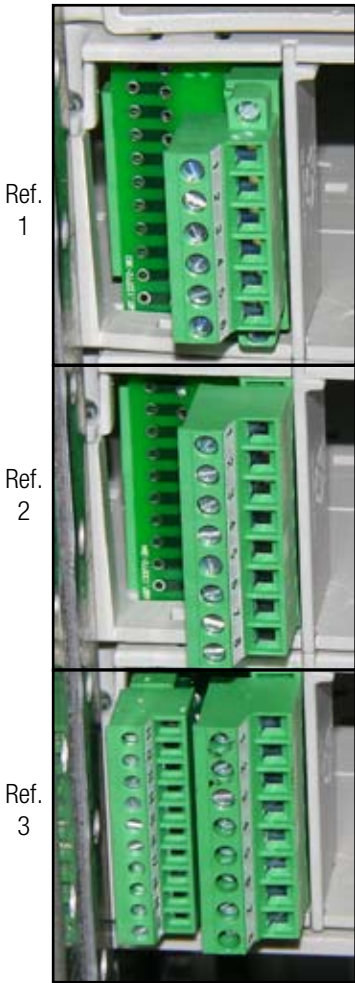
Multiplugs

Multiplugs are available for all external wiring for auxiliary contacts, CT's, EFM, Motor and ITS. This ensures easy plug-in and plug-out of the XR without having to redo the wiring. The multiplugs with screws are for extra safety especially when using CT's. The multiplugs can be ordered as accessories for easy assembly. For EFM, Motor and ITS the multiplug is factory fitted.



The multiplugs are available as follows:

Ref.	Size	Description	for cable size [mm²]	Order code
1	XR 00/1	Multiplug 6 kit f. CT's w. screws	6x2,5	1SEP408512R0001
2	XR 00/1	Multiplug 8 kit f. CT's	8x2,5	1SEP408510R0001
3	XR 00/1	Multiplug 18 kit f. CT's and aux. sw.	8x2,5 + 10x1,5	1SEP408511R0001
	XR 2/3	Multiplug 8 kit f. CT's w. screws	8x2,5	1SEP408515R0001
	XR 2/3	Multiplug 8 kit f. CT's	8x2,5	1SEP408513R0001
4	XR 2/3	Multiplug 20 kit f. CT's and aux. sw.	8x2,5 + 12x1,5	1SEP408514R0001



Proposal of terminal allocations at the XR multiplugs.

Current transformer	
1	CT no. 1
2	CT no. 1
3	CT no. 2
4	CT no. 2
5	CT no. 3
6	CT no. 3
7	
8	

Auxiliary switch	
1	Aux. switch NO no. 1
2	Aux. switch NO no. 1
3	Aux. switch NC no. 1
4	Aux. switch NC no. 1
5	Aux. switch NO no. 2
6	Aux. switch NO no. 2
7	Aux switch NC no. 2
8	Aux. switch NC no. 2



Multiplug terminal for EFM and Motor

EFM	
1	
2	
3	Aux. Relais NO
4	Aux. Relais NO
5	Aux. Relais NC
6	Aux. Relais NC
7	
8	

Motor	
1	Field Open (OFF)
2	Field Close (ON)
3	
4	
5	
6	
7	Neutral
8	+ 24 V DC

Motor - EFM	
1	Field Open
2	Field Close
3	Aux. Relais NO
4	Aux. Relais NO
5	Aux. Relais NC
6	Aux. Relais NC
7	Neutral
8	+ 24 V DC

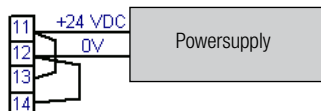
Multiplug terminal for ITS

ITS			
11	+24V DC	Earth fault transformer	1
12	0V	Earth fault transformer	2
13	24V Ext.	Digital Out common	3
14	0V Ext.	Digital Out 1	4
15	Field Open (*)	Digital Out 2	5
16	Field Close (*)	0V (RS-485)	6
17	Field Enable (*)	Modbus RS-485 RS+	7
18	0V Ext.	Modbus RS-485 RS-	8
19	Reserved for future use	Digital Input (*)	9
20	0V Ext.	0V Ext.	10

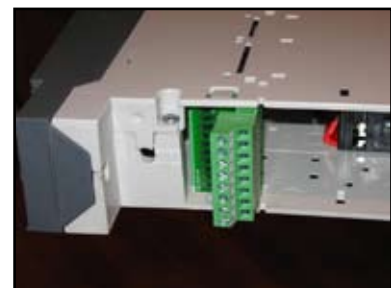
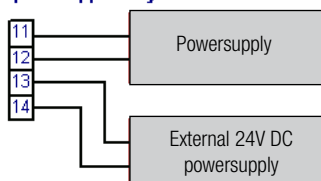
(*) These terminals are protected by means of optocoupler inputs. Powersupply for the optocouplers can be either internal 24V DC, or external (24V DC Ext.) 24V DC powersupply.

For internal powersupply, terminal 11 must be strapped to 13 and terminal 12 must be strapped to 14.

Optocouplers supplied by internal 24 VDC supply



Optocouplers supplied by external 24 VDC supply



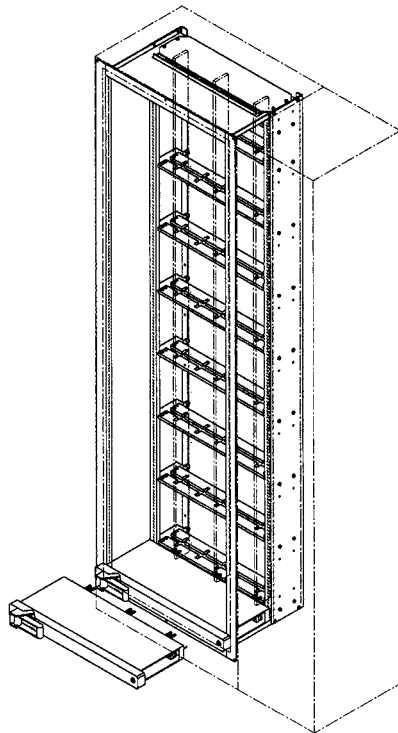
XR00 - multiplug 8 kit



XR 1 - multiplug 6 kit with screws



XR 2/3 - multiplug 20 kit



SlimLine Cassette

The SlimLine cassette is a complete steel framework with busbar supports. It is used as a framework for easy installation of the SlimLine product range into switchgear systems which do not accept the SlimLine directly.

Facts about the SlimLine cassette:

- Available in 4 sizes:
 - Height = 500 mm, max 10 pcs. 00-devices
 - Height = 1000 mm, max 20 pcs. 00-devices
 - Height = 1500 mm, max 30 pcs. 00-devices
 - Height = 2000 mm, max 40 pcs. 00-devices
- Supplied as a flat package without busbars
- Easy and fast assembly using self tapping screws
- For vertical or horizontal installation
- Aluzink coated profiles
- Front profiles as well as top- and bottom plates are black
- Extendable in the busbar direction
- Type tested busbar system
- 65 kA 10 x 40100 mm cu-busbars
- 3- and 4-pole solutions
- Available for 185 mm busbar distance

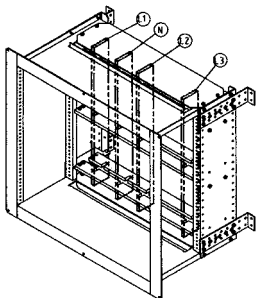
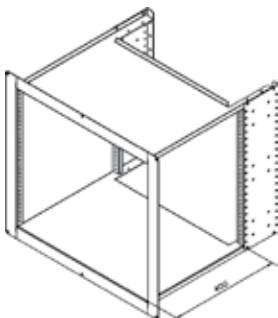
IP 20 busbar cover kit

Kit with busbar covers for IP 20 degree of protection. These can be snapped directly into the cassette.

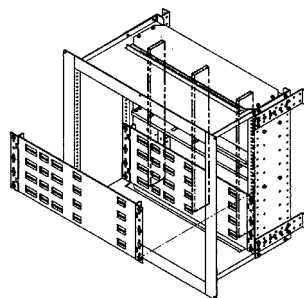
Kit for 400 mm depth

In order to extend the normal depth of 200 mm in a standard cassette to 400 mm, a special 400 mm extra top and bottom unit is available for replacing the standard top and bottom units. Two (2) units are required as replacements in one cassette.

Order code 1SEP102079P0001 for 1 unit.



Cassette for 185 mm busbar distance 3- and 4-pole



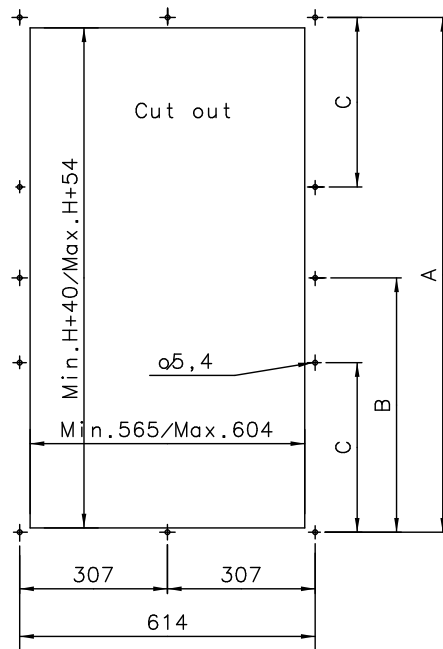
IP20 busbar cover kit
Universal 3- and 4-pole, 185 mm

H = 500 mm	1SEP102223R0001
H = 1000 mm	1SEP102223R0002
H = 1500 mm	1SEP102223R0003
H = 2000 mm	1SEP102223R0004

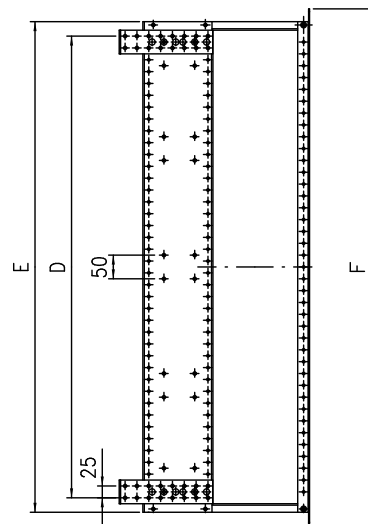
Kit for: H = 500 mm	NHP 407062R0001
H = 1000 mm	NHP 407062R0002
H = 1500 mm	NHP 407062R0003
H = 2000 mm	NHP 407062R0004

4. Accessories

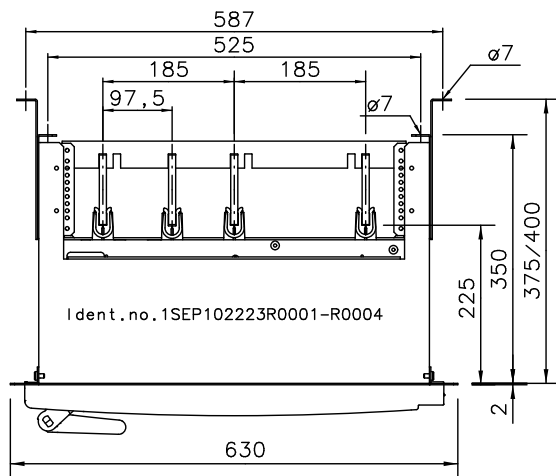
SlimLine Cassette



Front view



Side view

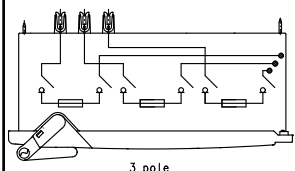


Top view (busbar distance = 185 mm)

H	A	B	C	D	E	F
500	574	-	-	475	536	590
1000	1074	-	358	975	1036	1090
1500	1574	-	525	1475	1536	1590
2000	2074	1037	520	1975	2036	2090

Rated current for the busbars			
CU-profile (mm)	Max current* (A)	Short circuit current (kA) rms 1 sec.	Rated Voltage (V)
10 x 40	715	65	690
10 x 50	852	65	690
10 x 60	985	65	690
10 x 80	1240	65	690
10 x 100	1490	65	690

* All values at 35°C ambient temperature and busbar temperature of 65°C.



SlimLine XR switch disconnecter fuse - 50 mm busbar distance

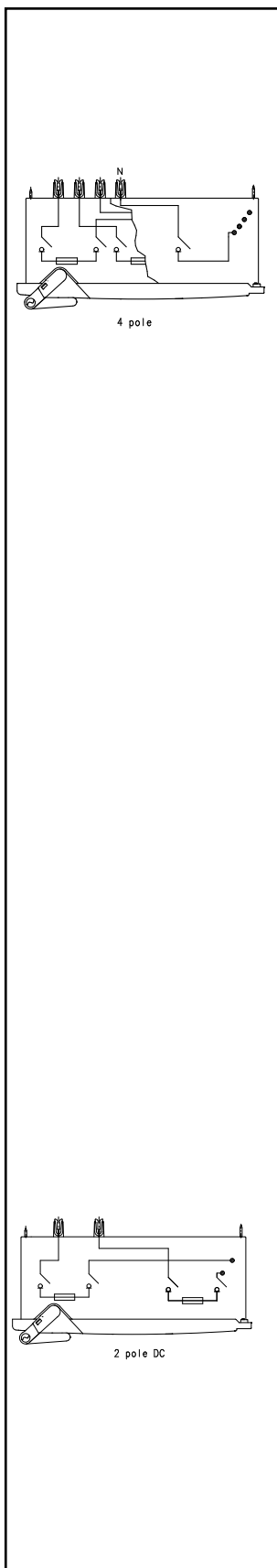
Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
3	160	XRE00-50-3P	1SEP102240R1100	3,63
3	250	XRE1-50-3P	1SEP102241R1100	6,75
3	400	XRE2-50-3P	1SEP102242R1100	15,00
3	400	XRE2-50-3P-NCT ¹⁾	1SEP102242R1500	14,74
3	630	XRE3-50-3P	1SEP102243R1100	15,36
3	630	XRE3-50-3P-NCT ¹⁾	1SEP102243R1500	15,10

Number of poles	Rated oper. current [A] AC23B	Type designation	Order code	Weight Per Unit (Kg)
3	160	XRM00-50-3P	1SEP102240R1300	3,63
3	250	XRM1-50-3P	1SEP102241R1300	6,75
3	400	XRM2-50-3P	1SEP102242R1300	15,00
3	400	XRM2-50-3P-NCT ¹⁾	1SEP102242R1600	14,74
3	630	XRM3-50-3P	1SEP102243R1300	15,36
3	630	XRM3-50-3P-NCT ¹⁾	1SEP102243R1600	15,10
3	160	XRM00-50-3P-EFM	1SEP102240R1301	3,63
3	250	XRM1-50-3P-EFM	1SEP102241R1301	6,75
3	400	XRM2-50-3P-EFM1	1SEP102242R1301	15,00
3	400	XRM2-50-3P-NCT-EFM ¹⁾	1SEP102242R1601	14,74
3	630	XRM3-50-3P-EFM	1SEP102243R1301	15,36
3	630	XRM3-50-3P-NCT-EFM ¹⁾	1SEP102243R1601	15,10
3	160	XRM00-50-3P-MOT	1SEP102240R1302	
3	250	XRM1-50-3P-MOT	1SEP102241R1302	
3	400	XRM2-50-3P-MOT	1SEP102242R1302	
3	630	XRM3-50-3P-MOT	1SEP102243R1302	
3	160	XRM00-50-3P-MOT-EFM	1SEP102240R1303	
3	250	XRM1-50-3P-MOT-EFM	1SEP102241R1303	
3	400	XRM2-50-3P-MOT-EFM	1SEP102242R1303	
3	630	XRM3-50-3P-MOT-EFM	1SEP102243R1303	
3	160	XRM00-50-3P-ITS	1SEP102240R1304	
3	250	XRM1-50-3P-ITS	1SEP102241R1304	
3	400	XRM2-50-3P-ITS	1SEP102242R1304	
3	630	XRM3-50-3P-ITS	1SEP102243R1304	
3	160	XRM00-50-3P-ITS-MOT	1SEP102240R1305	
3	250	XRM1-50-3P-ITS-MOT	1SEP102241R1305	
3	400	XRM2-50-3P-ITS-MOT	1SEP102242R1305	
3	630	XRM3-50-3P-ITS-MOT	1SEP102243R1305	

1) Not prepared for CT's

SlimLine

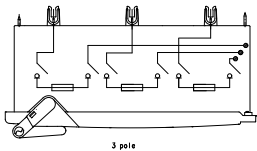
5. Ordering tables



SlimLine XR switch disconnecter fuse - 50 mm busbar distance

Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
4	160	XRE00-50-4P	1SEP102240R1400	4,16
4	250	XRE1-50-4P	1SEP102241R1400	7,15
4	400	XRE2-50-4P	1SEP102242R1400	16,19
4	400	XRE2-50-4P-NCT ¹⁾	1SEP102242R1700	15,83
4	630	XRE3-50-4P	1SEP102243R1400	16,78
4	630	XRE3-50-4P-NCT ¹⁾	1SEP102243R1700	16,20
4	160	XRE00-50-4P-EFM	1SEP102240R1401	4,27
4	250	XRE1-50-4P-EFM	1SEP102241R1401	7,27
4	400	XRE2-50-4P-EFM	1SEP102242R1401	16,30
4	400	XRE2-50-4P-NCT-EFM ¹⁾	1SEP102242R1701	15,94
4	630	XRE3-50-4P-EFM	1SEP102243R1401	16,89
4	630	XRE3-50-4P-NCT-EFM ¹⁾	1SEP102243R1701	16,31
4	160	XRE00-50-4P-MOT	1SEP102240R1402	
4	250	XRE1-50-4P-MOT	1SEP102241R1402	
4	400	XRE2-50-4P-MOT	1SEP102242R1402	
4	630	XRE3-50-4P-MOT	1SEP102243R1402	
4	160	XRE00-50-4P-MOT-EFM	1SEP102240R1403	
4	250	XRE1-50-4P-MOT-EFM	1SEP102241R1403	
4	400	XRE2-50-4P-MOT-EFM	1SEP102242R1403	
4	630	XRE3-50-4P-MOT-EFM	1SEP102243R1403	
4	160	XRE00-50-4P-ITS	1SEP102240R1404	
4	250	XRE1-50-4P-ITS	1SEP102241R1404	
4	400	XRE2-50-4P-ITS	1SEP102242R1404	
4	630	XRE3-50-4P-ITS	1SEP102243R1404	
4	160	XRE00-50-4P-ITS-MOT	1SEP102240R1405	
4	250	XRE1-50-4P-ITS-MOT	1SEP102241R1405	
4	400	XRE2-50-4P-ITS-MOT	1SEP102242R1405	
4	630	XRE3-50-4P-ITS-MOT	1SEP102243R1405	
Number of poles	Rated oper. current [A] DC23B (230V) DC21B (500V)	Type designation	Order code	Weight Per Unit (Kg)
2	160	XRM00-50-DC	1SEP102240R1200	3,33
2	250	XRM1-50-DC	1SEP102241R1200	6,25
2	400	XRM2-50-DC	1SEP102242R1200	13,10
2	630	XRM3-50-DC	1SEP102243R1200	13,46
2	160	XRM00-50-DC-MOT	1SEP102240R1202	
2	250	XRM1-50-DC-MOT	1SEP102241R1202	
2	400	XRM2-50-DC-MOT	1SEP102242R1202	
2	630	XRM3-50-DC-MOT	1SEP102243R1202	

1) Not prepared for CT's



SlimLine XR switch disconnecter fuse - 185 mm busbar distance

Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
3	160	XRE00-185-3P	1SEP102240R3100	3,63
3	250	XRE1-185-3P	1SEP102241R3100	6,75
3	400	XRE2-185-3P	1SEP102242R3100	15,00
3	400	XRE2-185-NCT-3P ¹⁾	1SEP102242R3500	14,74
3	630	XRE3-185-3P	1SEP102243R3100	15,36
3	630	XRE3-185-NCT-3P ¹⁾	1SEP102243R3500	15,10
Number of poles	Rated oper. current [A] AC23B	Type designation	Order code	Weight Per Unit (Kg)
3	160	XRM00-185-3P	1SEP102240R3300	3,63
3	250	XRM1-185-3P	1SEP102241R3300	6,75
3	400	XRM2-185-3P	1SEP102242R3300	15,00
3	400	XRM2-185-NCT-3P ¹⁾	1SEP102242R3600	14,74
3	630	XRM3-185-3P	1SEP102243R3300	15,36
3	630	XRM3-185-NCT-3P ¹⁾	1SEP102243R3600	15,10
3	160	XRM00-185-3P-EFM	1SEP102240R3301	3,63
3	250	XRM1-185-3P-EFM	1SEP102241R3301	6,75
3	400	XRM2-185-3P-EFM	1SEP102242R3301	15,00
3	400	XRM2-185-3P-NCT-EFM ¹⁾	1SEP102242R3601	14,74
3	630	XRM3-185-3P-EFM	1SEP102243R3301	15,36
3	630	XRM3-185-3P-NCT-EFM ¹⁾	1SEP102243R3601	15,10
3	160	XRM00-185-3P-MOT	1SEP102240R3302	
3	250	XRM1-185-3P-MOT	1SEP102241R3302	
3	400	XRM2-185-3P-MOT	1SEP102242R3302	
3	630	XRM3-185-3P-MOT	1SEP102243R3302	
3	160	XRM00-185-3P-MOT-EFM	1SEP102240R3303	
3	250	XRM1-185-3P-MOT-EFM	1SEP102241R3303	
3	400	XRM2-185-3P-MOT-EFM	1SEP102242R3303	
3	630	XRM3-185-3P-MOT-EFM	1SEP102243R3303	
3	160	XRM00-185-3P-ITS	1SEP102240R3304	
3	250	XRM1-185-3P-ITS	1SEP102241R3304	
3	400	XRM2-185-3P-ITS	1SEP102242R3304	
3	630	XRM3-185-3P-ITS	1SEP102243R3304	
3	160	XRM00-185-3P-ITS-MOT	1SEP102240R3305	
3	250	XRM1-185-3P-ITS-MOT	1SEP102241R3305	
3	400	XRM2-185-3P-ITS-MOT	1SEP102242R3305	
3	630	XRM3-185-3P-ITS-MOT	1SEP102243R3305	

¹⁾ Not prepared for CT's

SlimLine

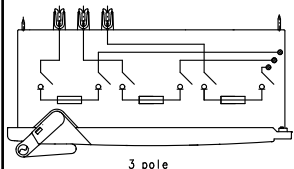
5. Ordering tables



SlimLine XR switch disconnecter fuse - 185 mm busbar distance

Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
4	160	XRE00-185-4P	1SEP102240R3400	4,10
4	250	XRE1-185-4P	1SEP102241R3400	7,15
4	400	XRE2-185-4P	1SEP102242R3400	16,19
4	400	XRE2-185-NCT-4P ¹⁾	1SEP102242R3700	15,83
4	630	XRE3-185-4P	1SEP102243R3400	16,78
4	630	XRE3-185-NCT-4P ¹⁾	1SEP102243R3700	16,20
4	160	XRE00-185-4P-EFM	1SEP102240R3401	4,27
4	250	XRE1-185-4P-EFM	1SEP102241R3401	7,27
4	400	XRE2-185-4P-EFM	1SEP102242R3401	16,30
4	400	XRE2-185-4P-NCT-EFM ¹⁾	1SEP102242R3701	15,94
4	630	XRE3-185-4P-EFM	1SEP102243R3401	16,89
4	630	XRE3-185-4P-NCT-EFM ¹⁾	1SEP102243R3701	16,31
4	160	XRE00-185-4P-MOT	1SEP102240R3402	
4	250	XRE1-185-4P-MOT	1SEP102241R3402	
4	400	XRE2-185-4P-MOT	1SEP102242R3402	
4	630	XRE3-185-4P-MOT	1SEP102243R3402	
4	160	XRE00-185-4P-MOT-EFM	1SEP102240R3403	
4	250	XRE1-185-4P-MOT-EFM	1SEP102241R3403	
4	400	XRE2-185-4P-MOT-EFM	1SEP102242R3403	
4	630	XRE3-185-4P-MOT-EFM	1SEP102243R3403	
4	160	XRE00-185-4P-ITS	1SEP102240R3404	
4	250	XRE1-185-4P-ITS	1SEP102241R3404	
4	400	XRE2-185-4P-ITS	1SEP102242R3404	
4	630	XRE3-185-4P-ITS	1SEP102243R3404	
4	160	XRE00-185-4P-ITS-MOT	1SEP102240R3405	
4	250	XRE1-185-4P-ITS-MOT	1SEP102241R3405	
4	400	XRE2-185-4P-ITS-MOT	1SEP102242R3405	
4	630	XRE3-185-4P-ITS-MOT	1SEP102243R3405	
Number of poles	Rated oper. current [A] DC23B (230V) DC21B (500V)	Type designation	Order code	Weight Per Unit (Kg)
2	160	XRM00-185-DC	1SEP102240R3200	3,33
2	250	XRM1-185-DC	1SEP102241R3200	6,25
2	400	XRM2-185-DC	1SEP102242R3200	13,10
2	630	XRM3-185-DC	1SEP102243R3200	13,46
2	160	XRM00-185-DC-MOT	1SEP102240R3202	
2	250	XRM1-185-DC-MOT	1SEP102241R3202	
2	400	XRM2-185-DC-MOT	1SEP102242R3202	
2	630	XRM3-185-DC-MOT	1SEP102243R3202	

1) Not prepared for CT's



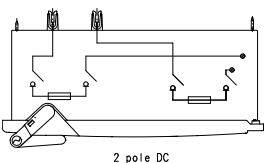
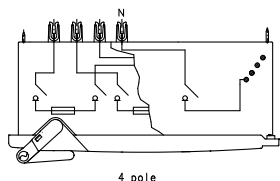
SlimLine XR Switch disconnecter fuses - 50 mm busbar distance, British standard versions (BS)

Number of poles	Rated oper. current [A] AC23B	Type designation	Order code	Weight Per Unit (Kg)
3	63	XRM63BS-50-3P	1SEP102244R1300	3,60
3	100	XRM100BS-50-3P	1SEP102245R1300	3,60
3	160	XRM160BS-50-3P	1SEP102246R1300	3,60
3	250	XRM250BS-50-3P	1SEP102247R1300	6,80
3	400	XRM400BS-50-3P	1SEP102248R1300	14,80
3	400	XRM400BS-50-3P-NCT ¹⁾	1SEP102248R1600	14,50
3	630	XRM630BS-50-3P	1SEP102249R1300	15,00
3	630	XRM630BS-50-3P-NCT ¹⁾	1SEP102249R1600	14,80
3	160	XRM160BS-50-3P-EFM	1SEP102246R1301	3,60
3	250	XRM250BS-50-3P-EFM	1SEP102247R1301	6,80
3	400	XRM400BS-50-3P-EFM	1SEP102248R1301	14,80
3	400	XRM400BS-50-3P-NCT-EFM ¹⁾	1SEP102248R1601	14,50
3	630	XRM630BS-50-3P-EFM	1SEP102249R1301	15,00
3	630	XRM630BS-50-3P-NCT-EFM ¹⁾	1SEP102249R1601	14,80
3	160	XRM160BS-50-3P-MOT	1SEP102246R1302	
3	250	XRM250BS-50-3P-MOT	1SEP102247R1302	
3	400	XRM400BS-50-3P-MOT	1SEP102248R1302	
3	630	XRM630BS-50-3P-MOT	1SEP102249R1302	
3	160	XRM160BS-50-3P-ITS	1SEP102246R1304	
3	250	XRM250BS-50-3P-ITS	1SEP102247R1304	
3	400	XRM400BS-50-3P-ITS	1SEP102248R1304	
3	630	XRM630BS-50-3P-ITS	1SEP102249R1304	
3	160	XRM160BS-50-3P-ITS-MOT	1SEP102246R1305	
3	250	XRM250BS-50-3P-ITS-MOT	1SEP102247R1305	
3	400	XRM400BS-50-3P-ITS-MOT	1SEP102248R1305	
3	630	XRM630BS-50-3P-ITS-MOT	1SEP102249R1305	

1) Not prepared for CT's

SlimLine

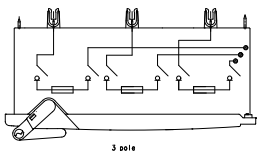
5. Ordering tables



SlimLine XR Switch disconnecter fuses - 50 mm busbar distance, British standard versions (BS)

Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
4	160	XRE160BS-50-4P	1SEP102246R1400	5,20
4	250	XRE250BS-50-4P	1SEP102247R1400	8,50
4	400	XRE400BS-50-4P	1SEP102248R1400	17,30
4	400	XRE400BS-50-4P-NCT ¹⁾	1SEP102248R1700	16,80
4	630	XRE630BS-50-4P	1SEP102249R1400	17,70
4	630	XRE630BS-50-4P-NCT ¹⁾	1SEP102249R1700	17,10
4	160	XRE160BS-50-4P-EFM	1SEP102246R1401	5,20
4	250	XRE250BS-50-4P-EFM	1SEP102247R1401	8,50
4	400	XRE400BS-50-4P-EFM	1SEP102248R1401	17,30
4	400	XRE400BS-50-4P-NCT-EFM ¹⁾	1SEP102248R1701	16,80
4	630	XRE630BS-50-4P-EFM	1SEP102249R1401	17,70
4	630	XRE630BS-50-4P-NCT-EFM ¹⁾	1SEP102249R1701	17,10
4	160	XRE160BS-50-4P-MOT	1SEP102246R1402	
4	250	XRE250BS-50-4P-MOT	1SEP102247R1402	
4	400	XRE400BS-50-4P-MOT	1SEP102248R1402	
4	630	XRE630BS-50-4P-MOT	1SEP102249R1402	
4	160	XRE160BS-50-4P-ITS	1SEP102246R1404	
4	250	XRE250BS-50-4P-ITS	1SEP102247R1404	
4	400	XRE400BS-50-4P-ITS	1SEP102248R1404	
4	630	XRE630BS-50-4P-ITS	1SEP102249R1404	
4	160	XRE160BS-50-4P-ITS-MOT	1SEP102246R1405	
4	250	XRE250BS-50-4P-ITS-MOT	1SEP102247R1405	
4	400	XRE400BS-50-4P-ITS-MOT	1SEP102248R1405	
4	630	XRE630BS-50-4P-ITS-MOT	1SEP102249R1405	
Number of poles	Rated oper. current [A] DC23B (230V) DC21B (500V)	Type designation	Order code	Weight Per Unit (Kg)
2	160/-	XRM160BS-50-DC	1SEP102246R1200	
2	250/250	XRM250BS-50-DC	1SEP102247R1200	
2	400/400	XRM400BS-50-DC	1SEP102248R1200	
2	630/630	XRM630BS-50-DC	1SEP102249R1200	
2	160/-	XRM160BS-50-DC-MOT	1SEP102246R1202	
2	250/250	XRM250BS-50-DC-MOT	1SEP102247R1202	
2	400/400	XRM400BS-50-DC-MOT	1SEP102248R1202	
2	630/630	XRM630BS-50-DC-MOT	1SEP102249R1202	

1) Not prepared for CT's



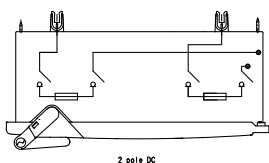
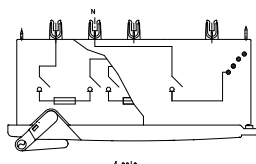
SlimLine XR Switch disconnecter fuses - 185 mm busbar distance, British standard versions (BS)

Number of poles	Rated oper. current [A] AC23B	Type designation	Order code	Weight Per Unit (Kg)
3	63	XRM63BS-185-3P	1SEP102244R3300	3,60
3	100	XRM100BS-185-3P	1SEP102245R3300	3,60
3	160	XRM160BS-185-3P	1SEP102246R3300	3,60
3	250	XRM250BS-185-3P	1SEP102247R3300	6,80
3	400	XRM400BS-185-3P	1SEP102248R3300	14,80
3	400	XRM400BS-185-3P-NCT ¹⁾	1SEP102248R3600	14,50
3	630	XRM630BS-185-3P	1SEP102249R3300	15,00
3	630	XRM630BS-185-3P-NCT ¹⁾	1SEP102249R3600	14,80
3	160	XRM160BS-185-3P-EFM	1SEP102246R3301	3,60
3	250	XRM250BS-185-3P-EFM	1SEP102247R3301	6,80
3	400	XRM400BS-185-3P-EFM	1SEP102248R3301	14,80
3	400	XRM400BS-185-3P-NCT-EFM ¹⁾	SEP102248R3601	14,50
3	630	XRM630BS-185-3P-EFM	1SEP102249R3301	15,00
3	630	XRM630BS-185-3P-NCT-EFM ¹⁾	1SEP102249R3601	14,80
3	160	XRM160BS-185-3P-MOT	1SEP102246R3302	
3	250	XRM250BS-185-3P-MOT	1SEP102247R3302	
3	400	XRM400BS-185-3P-MOT	1SEP102248R3302	
3	630	XRM630BS-185-3P-MOT	1SEP102249R3302	
3	160	XRM160BS-185-3P-ITS	1SEP102246R3304	
3	250	XRM250BS-185-3P-ITS	1SEP102247R3304	
3	400	XRM400BS-185-3P-ITS	1SEP102248R3304	
3	630	XRM630BS-185-3P-ITS	1SEP102249R3304	
3	160	XRM160BS-185-3P-ITS-MOT	1SEP102246R3305	
3	250	XRM250BS-185-3P-ITS-MOT	1SEP102247R3305	
3	400	XRM400BS-185-3P-ITS-MOT	1SEP102248R3305	
3	630	XRM630BS-185-3P-ITS-MOT	1SEP102249R3305	

1) Not prepared for CT's

SlimLine

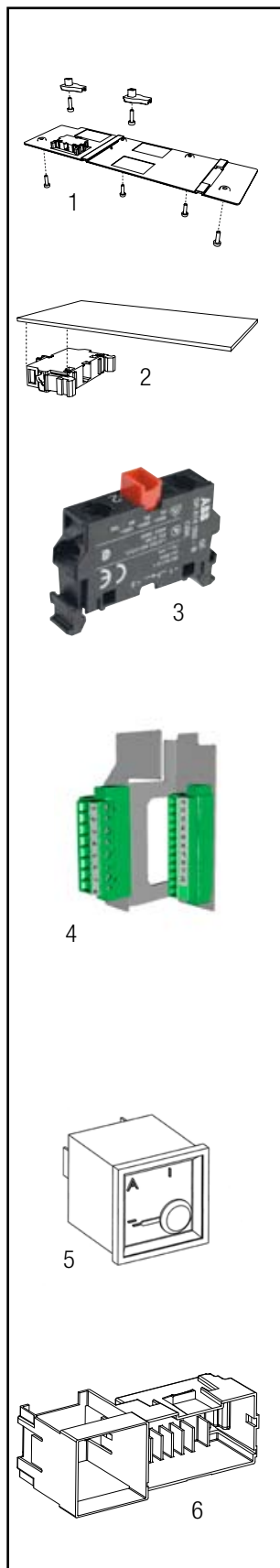
5. Ordering tables



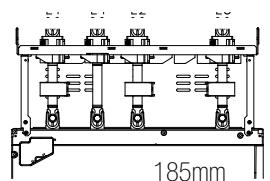
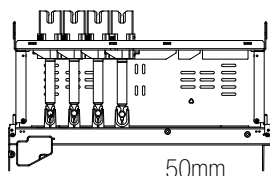
SlimLine XR Switch disconnecter fuses - 185 mm busbar distance, British standard versions (BS)

Number of poles	Rated oper. current [A] AC22B	Type designation	Order code	Weight Per Unit (Kg)
4	160	XRE160BS-185-4P	1SEP102246R3400	5,20
4	250	XRE250BS-185-4P	1SEP102247R3400	8,50
4	400	XRE400BS-185-4P	1SEP102248R3400	17,30
4	400	XRE400BS-185-4P-NCT ¹⁾	1SEP102248R3700	16,80
4	630	XRE630BS-185-4P	1SEP102249R3400	17,70
4	630	XRE630BS-185-4P-NCT ¹⁾	1SEP102249R3700	17,10
4	160	XRE160BS-185-4P-EFM	1SEP102246R3401	5,20
4	250	XRE250BS-185-4P-EFM	1SEP102247R3401	8,50
4	400	XRE400BS-185-4P-EFM	1SEP102248R3401	17,30
4	400	XRE400BS-185-4P-NCT-EFM ¹⁾	1SEP102248R3701	16,80
4	630	XRE630BS-185-4P-EFM	1SEP102249R3401	17,70
4	630	XRE630BS-185-4P-NCT-EFM ¹⁾	1SEP102249R3701	17,10
4	160	XRE160BS-185-4P-MOT	1SEP102246R3402	
4	250	XRE250BS-185-4P-MOT	1SEP102247R3402	
4	400	XRE400BS-185-4P-MOT	1SEP102248R3402	
4	630	XRE630BS-185-4P-MOT	1SEP102249R3402	
4	160	XRE160BS-185-4P-ITS	1SEP102246R3404	
4	250	XRE250BS-185-4P-ITS	1SEP102247R3404	
4	400	XRE400BS-185-4P-ITS	1SEP102248R3404	
4	630	XRE630BS-185-4P-ITS	1SEP102249R3404	
4	160	XRE160BS-185-4P-ITS-MOT	1SEP102246R3405	
4	250	XRE250BS-185-4P-ITS-MOT	1SEP102247R3405	
4	400	XRE400BS-185-4P-ITS-MOT	1SEP102248R3405	
4	630	XRE630BS-185-4P-ITS-MOT	1SEP102249R3405	
Number of poles	Rated oper. current [A] DC23B (230V) DC21B (500V)	Type designation	Order code	Weight Per Unit (Kg)
2	160/-	XRM160BS-185-DC	1SEP102246R3200	
2	250/250	XRM250BS-185-DC	1SEP102247R3200	
2	400/400	XRM400BS-185-DC	1SEP102248R3200	
2	630/630	XRM630BS-185-DC	1SEP102249R3200	
2	160/-	XRM160BS-185-DC-MOT	1SEP102246R3202	
2	250/250	XRM250BS-185-DC-MOT	1SEP102247R3202	
2	400/400	XRM400BS-185-DC-MOT	1SEP102248R3202	
2	630/630	XRM630BS-185-DC-MOT	1SEP102249R3202	

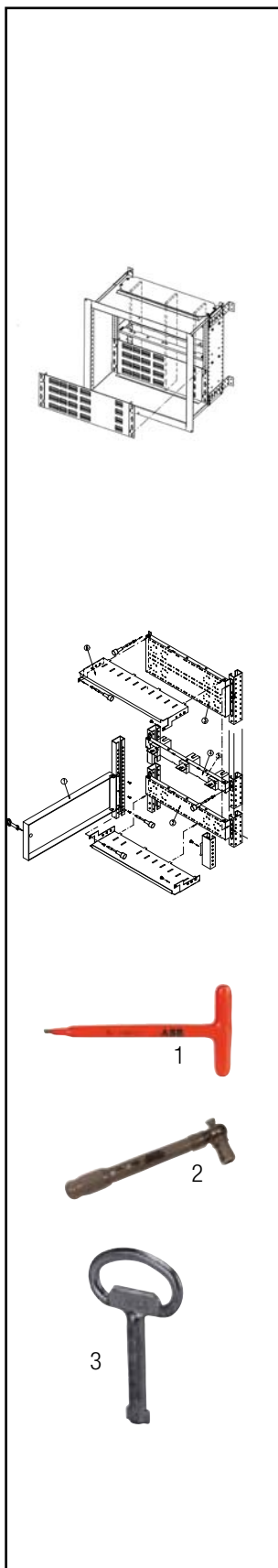
1) Not prepared for CT's



Type designation	Description	Order code
Auxiliary switches		
1 XR00 Auxiliary switch 1NO kit	Kit incl. 1pcs, 1NO aux switch, transp. cover and screws	1SEP408504R0001
XR00 Auxiliary switch 1NC kit	Kit incl. 1pcs, 1 NC aux switch, transp. cover and screws	1SEP408505R0001
XR1 Auxiliary switch 1NO kit	Kit incl. 1pcs 1NO aux switch, transp. cover and screws	1SEP408506R0001
XR1 Auxiliary switch 1NC kit	Kit incl. 1pcs 1NC aux switch, transp. cover and screws	1SEP408507R0001
2 XR2/3 Auxiliary switch 1NO kit	Kit incl. 1pcs 1NO aux switch, transp. cover and screws	1SEP408508R0001
XR2/3 Auxiliary switch 1NC kit	Kit incl. 1pcs 1NC aux switch, transp. cover and screws	1SEP408509R0001
XR Auxiliary switch 1NO	Single aux. switch to be used as aux. switch no 2,3,4	1SEP407742R0013
3 XR Auxiliary switch 1NC	Single aux. switch to be used as aux. switch no 2,3,4	1SEP407742R0012
Multi plugs		
XR00/1 Multi plug 6 kit f. CT's with screws		1SEP408512R0001
XR00/1 Multi plug 8 kit f. CT's		1SEP408510R0001
XR00/1 Multi plug 18 kit f. CT's and aux switches		1SEP408511R0001
4 XR2/3 Multi plug 8 kit f. CT's with screws		1SEP408515R0001
XR2/3 Multi plug kit 8 f. CT's		1SEP408513R0001
XR2/3 Multi plug kit 20 f. CT's and aux switches		1SEP408514R0001
5 Ammeter		
XR Ammeter 0-150-180/1A		NHSN714003P0150
XR Ammeter 0-150-180/5A		NHSN714003P1150
XR Ammeter 0-250-300/1A		NHSN714003P0250
XR Ammeter 0-250-300/5A		NHSN714003P1250
XR Ammeter 0-400-480/1A		NHSN714003P0400
XR Ammeter 0-400-480/5A		NHSN714003P1400
XR Ammeter 0-600-720/1A		NHSN714003P0600
XR Ammeter 0-600-720/5A		NHSN714003P1600
6 Ammeter and EFM Bracket		
XR Ammeter and EFM bracket		1SEP408519R0001



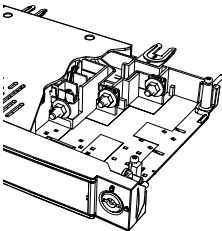
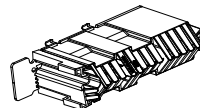
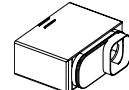
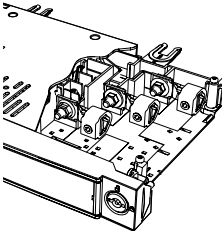
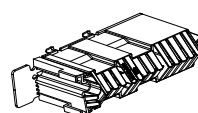
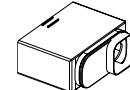
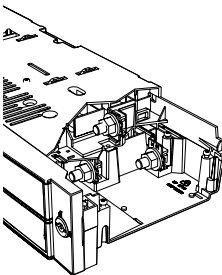
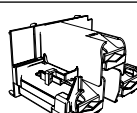
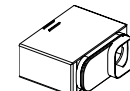
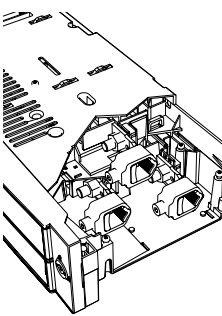
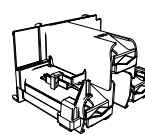
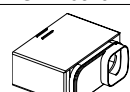
Type designation	Order code
Contact extensions for 50mm 2 pole	
XR00 Contact ext. 50 mm 2 pole	1SEP102127R0002
XR1 Contact ext. 50 mm 2 pole	1SEP102128R0002
XR2/3 Contact ext. 50 mm 2 pole	NHP 100495R0003
Contact extensions for 50mm 3 pole	
XR00 Contact ext. for 50 mm	1SEP102127R0001
XR1 Contact ext. for 50 mm	1SEP102128R0001
XR/SR-2/3 Contact ext. for 50mm	NHP 100495R0001
Contact extensions for 50mm 4 pole	
XR00 Contact ext. for 50 mm 4 pole	1SEP102137R0001
XR1 Contact ext. for 50 mm 4 pole	1SEP102138R0001
XR/SR-2/3 Contact ext. for 50mm 4 pole	1SEP101861R0001
Contact extensions for 185mm 2 pole	
XR00 Contact ext. 185 mm 2 pole	1SEP408541R0001
XR1 Contact ext. 185 mm 2 pole	1SEP408542R0001
XR2/3 Contact ext. for 185 mm 2 pole	1SEP408543R0001
Contact extensions for 185mm 3 pole	
XR00 Contact ext. for 185 mm	1SEP102135R0001
XR1 Contact ext. for 185 mm	1SEP102136R0001
XR/SR2/3 Contact ext. for 185mm	NHP 100886R0001
Contact extensions for 185mm 4 pole	
XR00 Contact ext. for 185 mm 4 pole	1SEP102208R0001
XR1 Contact ext. for 185 mm 4 pole	1SEP102209R0001
XR/SR-2/3 Contact ext. for 185mm 4 pole	1SEP102198R0001
Front covers with operating handle for NH (spare parts)	
XR00 Front cover w/operating handle for NH Incl. "E" and "M"	1SEP102219R0002
XR1 Front cover w/operating handle for NH Incl. "E" and "M"	1SEP102222R0002
XR2 Front cover w/operating handle for NH Incl. "E" and "M"	1SEP408521R0001
XR3 Front cover w/operating handle for NH Incl. "E" and "M"	1SEP408521R0003
Front covers with operating handle for BS (spare parts)	
XR00 Front cover w/operating handle for BS Incl. "E" and "M" (M for 63, 100, 160A)	1SEP102219R0012
XR1 Front cover w/operating handle for BS Incl. "E" and "M"	1SEP102222R0012
XR2 Front cover w/operating handle for BS Incl. "E" and "M"	1SEP408521R0011
XR3 Front cover w/operating handle for BS Incl. "E" and "M"	1SEP408521R0013



Type designation	Order code	Gross Weight, [kg]
SlimLine cassette		
XR/SR - SlimLine cassette 185mm/500mm	1SEP102223R0001	
XR/SR - SlimLine cassette 185mm/1000mm	1SEP102223R0002	21,2
XR/SR - SlimLine cassette 185mm/1500mm	1SEP102223R0003	30
XR/SR - SlimLine cassette 185mm/2000mm	1SEP102223R0004	38
XR/SR - IP20 busbar cover 500mm	NHP 407062R0001	1,5
XR/SR - IP20 busbar cover 1000mm	NHP 407062R0002	2,8
XR/SR - IP20 busbar cover 1500mm	NHP 407062R0003	4,1
XR/SR - IP20 busbar cover 2000mm	NHP 407062R0004	5,4
XR/SR - Single IP20 busbar cover 200mm	NHP 101474P0001	0,5
XR/SR - Top-bottom unit, depth 400mm	1SEP102079P0001	
Service modules		
XR/SR - Service module top/bottom seg. plate	NHP 101155R0001	0,2
XR/SR - Service module mount. plate 100mm	NHP 405897R0001	0,8
XR/SR - Service module mount. plate 200mm	NHP 405897R0002	1,5
XR/SR - Service module mount. plate 300mm	NHP 405897R0003	2,2
XR/SR - Service module mount. plate 400mm	NHP 405897R0004	2,9
XR/SR - Front blind cover 100mm hinged	NHP 101323R6001	1,4
XR/SR - Front blind cover 200mm hinged	NHP 101323R6002	2,5
XR/SR - Front blind cover 300mm hinged	NHP 101323R6003	3,6
XR/SR - Front blind cover 400mm hinged	NHP 101323R6004	4,7
XR/SR - Busbar connection module 60mm/400A	NHP 101194R0001	2,2
XR/SR - Busbar connection module 185mm/400A	NHP 101193R0001	3,4
XR/SR - Busbar holder 185 mm	1SEP102234P0001	2,2
Common accessories		
XR Ventilated blind cover 50mm IP41	1SEP408528R0001	0,8
XR/SR Module guide rails 200mm	NHP 200947R0002	1,3
XR/SR Module guide rails 400mm	NHP 200947R0003	1,8
1 Cable terminal key (tool)	NHSN950001P0006	0,6
2 Cable terminal torque key (tool)	NHSN950001P0002	2
Extension for torque key NV1	NHSN950001P0001	0,4
3 Front cover key	GMN 436770P0022	0,1

Cable termination / Cable shrouds

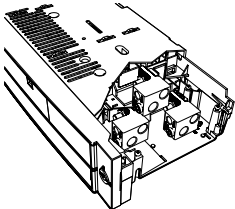
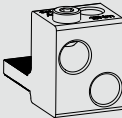
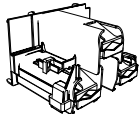
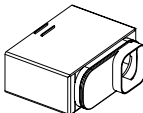
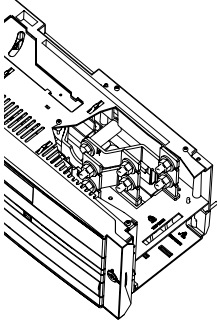
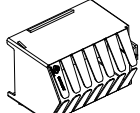
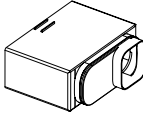
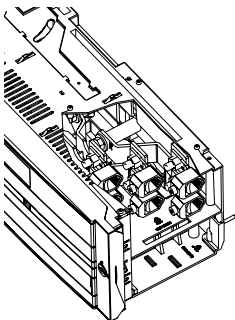
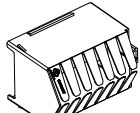
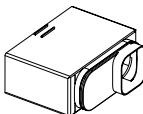
The XR is delivered with bolts as standard for connection of cables with lugs.
Cable clamps for Al/Cu-cables are available as accessories.

Size	Type of clamp/bolt w/order code	Cable (Al/Cu) size (mm²)		Torque (Nm)	Number of poles	Cable shroud w/order code	
XR00 160 A							
	M8 (Standard)	- 95 - 120 ¹⁾		15 Nm	2 / 3	 1SEP408496R0001	
					N / 4th	 1SEP407775R0001	
	Single clamp			 15 Nm	2 / 3	 1SEP408496R0001	
	3 pole: 1SEP408499R0001						Re: 10 - 50
	4 pole: 1SEP408501R0001	Rm: 10 - 50	Se: 50 - 70	95	 18 Nm	N / 4th	 1SEP407775R0001
		Sm: 35 - 50					
XR1 250A							
	M12 (Standard)	- 240		30 Nm	2 / 3	 1SEP408497R0001	
					N / 4th	 1SEP407775R0001	
	Single clamp			 20 Nm	2 / 3	 1SEP408497R0001	
	3 pole: 1SEP408500R0001						Re: 16 - 70
	4 pole: 1SEP408502R0001	Rm: 16 - 35	Se: 35 - 70	95 - 300	 23 Nm	N / 4th	 1SEP407775R0001
		Sm: 35 - 50					

1) Cu cable lug acc. to DIN 46235, when not using integrated CT's.

Cable termination / Cable shrouds

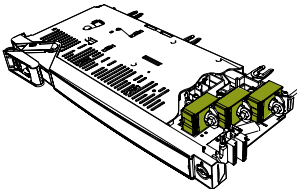
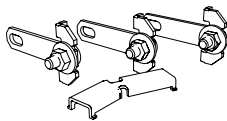
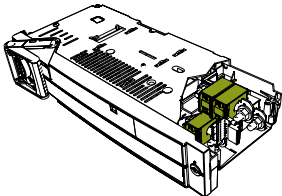
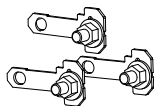
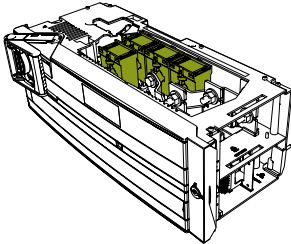
The XR is delivered with bolts as standard for connection of cables with lugs.
Cable clamps for Al/Cu-cables are available as accessories.

Size	Type of clamp/bolt w/order code	Cable (Al/Cu) size (mm²)		Torque (Nm)	Number of poles	Cable shroud w/order code
XR1 250A						
	Double clamp 3 pole: 1SEP408205R0003			15 Nm	2 / 3	 1SEP408497R0001
	4 pole: 1SEP408205R0004	Re: 10 - 150 Rm: 10 - 95 Se: 10 - 120 Sm: 10 - 95			N / 4th	 1SEP407775R0001
XR2/3 400/630A						
	M12 (Standard)	2 x 240		30 Nm	2 / 3	 1SEP408498R0001
					N / 4th	 1SEP407775R0001
	Double clamp 3 pole: 1SEP304446R0002			 20 Nm	2 / 3	 1SEP408498R0001
	4 pole: 1SEP408503R0001	Re: 16 - 70 Rm: 16 - 35 Se: 35 - 70 Sm: 35 - 50	70 - 150 50 - 185 95 - 300 70 - 240	 23 Nm	N / 4th	 1SEP407775R0001

SlimLine

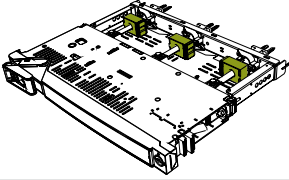
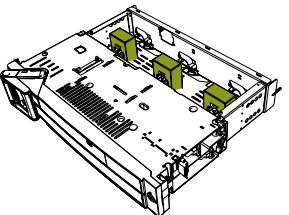
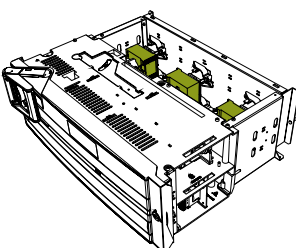
5. Ordering tables

Current metering in XR Standard apparatus 1 and 3 phase

	Type	No of CT's pr XR	MBS-type	Ratio	Power	Class	Order code
	XR00/1 Apparatus	1,2,3,4	ASR 20.3	150/1	3,75	1	NHSN718054P1015
	XR00/1 Apparatus	1,2,3,4	ASR 20.3	150/5	3,75	1	NHSN718054P5015
	XR00/1 Apparatus	1,2,3,4	ASR 20.3	150/1	2,5	0,5	NHSN718055P1015
	XR00/1 Apparatus	1,2,3,4	ASR 20.3	150/5	2,5	0,5	NHSN718055P5015
	XR00 Cu Terminal extension for 1 CT or 4th CT for ASR 20.3						1SEP408524R0001
	XR00 Cu Terminal extension kit for 3 phase CT's for ASR 20.3						1SEP408523R0001
	XR00 Terminal ext. for 1 CT or 4th CT Ø 14 mm for ASR 14.3						1SEP408630R0001
	XR00 Terminal ext. kit for 3 phase CT's Ø 14mm for ASR 14.3						1SEP408630R0003
							
	XR1 Apparatus	1,2,3,4	ASR 20.3	250/1	7,5	1	NHSN718054P1025
	XR1 Apparatus	1,2,3,4	ASR 20.3	250/5	7,5	1	NHSN718054P5025
	XR1 Apparatus	1,2,3,4	ASR 20.3	250/1	5	0,5	NHSN718055P1025
	XR1 Apparatus	1,2,3,4	ASR 20.3	250/5	5	0,5	NHSN718055P5025
	XR1 Cu Terminal extension for 1 CT for ASR 20.3						1SEP408576R0001
	XR1 Cu Terminal extension kit for 3 phase CT's for ASR 20.3						1SEP408525R0001
	XR1 Cu Terminal extension kit for 4 CT's for ASR 20.3						1SEP408526R0001
							
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	250/1	10	1	NHSN718047P1025
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	250/5	10	1	NHSN718047P5025
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	300/1	10	1	NHSN718047P1030
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	300/5	10	1	NHSN718047P5030
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	400/1	10	1	NHSN718047P1040
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	400/5	10	1	NHSN718047P5040
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	500/1	10	1	NHSN718047P1050
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	500/5	10	1	NHSN718047P5050
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	600/1	10	1	NHSN718047P1060
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	600/5	10	1	NHSN718047P5060
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	300/1	10	0,5	NHSN718056P1030
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	300/5	10	0,5	NHSN718056P5030
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	400/1	10	0,5	NHSN718056P1040
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	400/5	10	0,5	NHSN718056P5040
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	500/1	10	0,5	NHSN718056P1050
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	500/5	10	0,5	NHSN718056P5050
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	600/1	10	0,5	NHSN718056P1060
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	600/5	10	0,5	NHSN718056P5060
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	250/5	5	0,2 s	NHSN718053P5025
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	300/5	5	0,2 s	NHSN718053P5030
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	400/5	5	0,2 s	NHSN718053P5040
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	500/5	5	0,2 s	NHSN718053P5050
	XR2/3 Apparatus	1,2,3,4	ASK 41.4	600/5	5	0,2 s	NHSN718053P5060

NOTE! All CTs are delivered as a single unit. For 3 phase measuring 3 units have to be ordered.
The CT's can also be ordered directly from MBS or local MBS agent or equivalent CT's can be used.

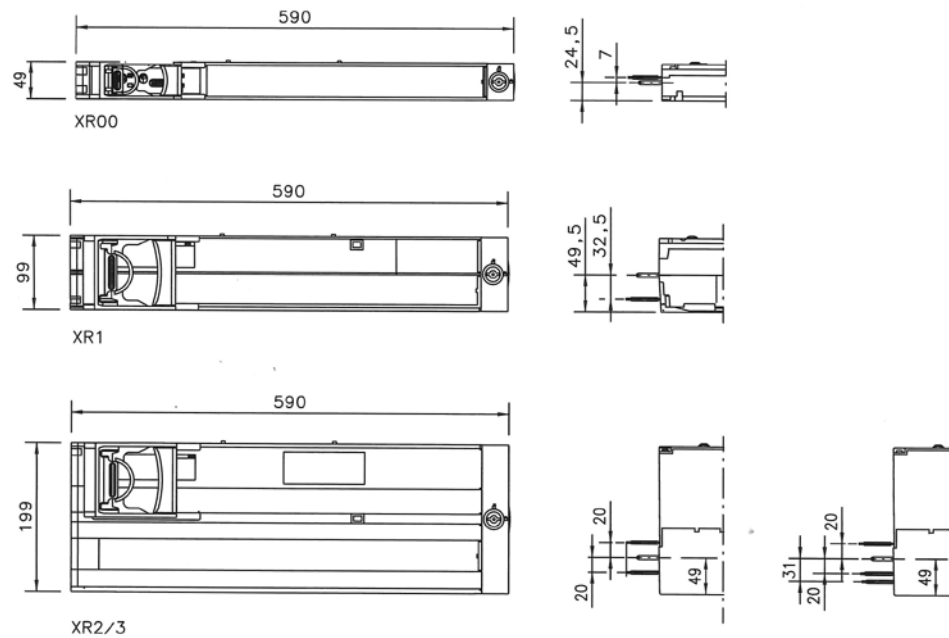
Current metering in XR with contact extension 1 and 3 phase

	Type	No of CT's pr XR	MBS-type	Ratio	Power	Class	Order code
	XR00 Cont. ext.	1,2,3	ASR 20.3	150/1	3,75	1	NHSN718054P1015
	XR00 Cont. ext.	1,2,3	ASR 20.3	150/5	3,75	1	NHSN718054P5015
	XR00 Cont. ext.	1,2,3,	ASR 20.3	150/1	2,5	0,5	NHSN718055P1015
	XR00 Cont. ext.	1,2,3,	ASR 20.3	150/5	2,5	0,5	NHSN718055P5015
	XR1 Cont. ext.	1,2,3	ASK 31.3	250/1	5	1	NHSN718045P1025
	XR1 Cont. ext.	1,2,3	ASK 31.3	250/5	5	1	NHSN718045P5025
	XR1 Cont. ext.	1,2,3	ASK 41.4	250/1	10	1	NHSN718047P1025
	XR1 Cont. ext.	1,2,3	ASK 41.4	250/5	10	1	NHSN718047P5025
	XR1 Cont. ext.	1,2,3	ASK 31.3	250/1	5	0,5	NHSN718046P1025
	XR1 Cont. ext.	1,2,3	ASK 31.3	250/5	5	0,5	NHSN718046P5025
	XR1 Cont. ext.	1,2,3	ASK 41.4	250/1	5	0,5	NHSN718056P1025
	XR1 Cont. ext.	1,2,3	ASK 41.4	250/5	5	0,5	NHSN718056P5025
	XR1 Cont. ext.	1,2,3	ASK 41.4	250/5	5	0,2 s	NHSN718053P5025
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	250/1	10	1	NHSN718047P1025
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	250/5	10	1	NHSN718047P5025
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	300/1	10	1	NHSN718047P1030
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	300/5	10	1	NHSN718047P5030
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	400/1	10	1	NHSN718047P1040
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	400/5	10	1	NHSN718047P5040
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	500/1	10	1	NHSN718047P1050
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	500/5	10	1	NHSN718047P5050
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	600/1	10	1	NHSN718047P1060
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	600/5	10	1	NHSN718047P5060
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	300/1	10	0,5	NHSN718056P1030
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	300/5	10	0,5	NHSN718056P5030
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	400/1	10	0,5	NHSN718056P1040
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	400/5	10	0,5	NHSN718056P5040
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	500/1	10	0,5	NHSN718056P1050
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	500/5	10	0,5	NHSN718056P5050
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	600/1	10	0,5	NHSN718056P5160
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	600/5	10	0,5	NHSN718056P5060
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	250/5	5	0,2 s	NHSN718053P5025
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	300/5	5	0,2 s	NHSN718053P5030
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	400/5	5	0,2 s	NHSN718053P5040
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	500/5	5	0,2 s	NHSN718053P5050
	XR2/3 Cont. ext.	1,2,3	ASK 41.4	600/5	5	0,2 s	NHSN718053P5060

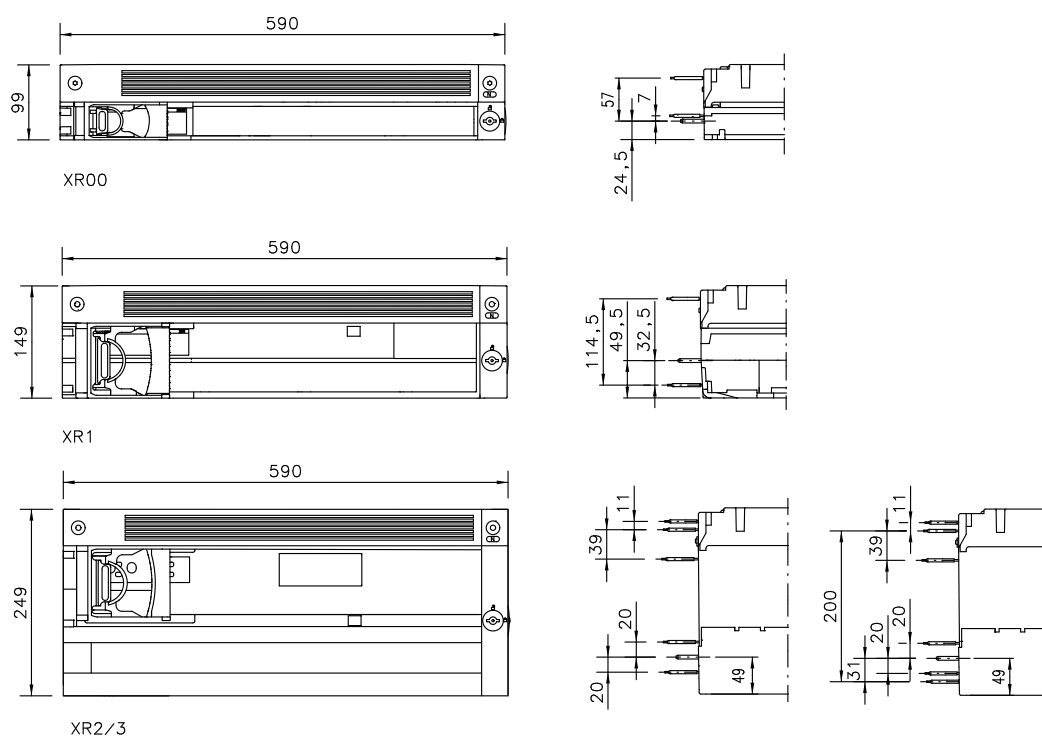
NOTE! All CTs are delivered as a single unit. For 3 phase measuring 3 units have to be ordered.
The CT's can also be ordered directly from MBS or local MBS agent or equivalent CT's can be used.

XR Front / side view

2 pole / 3 pole



4 pole

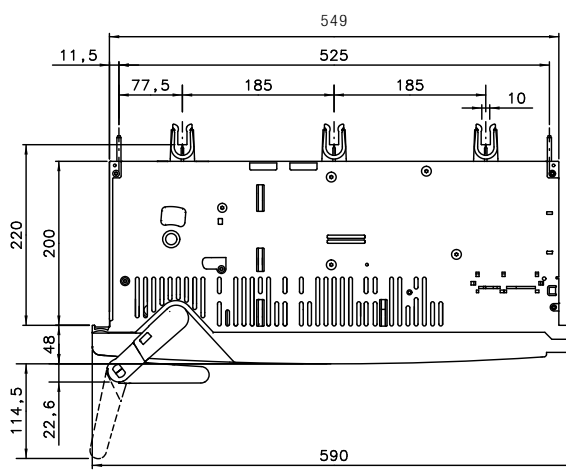
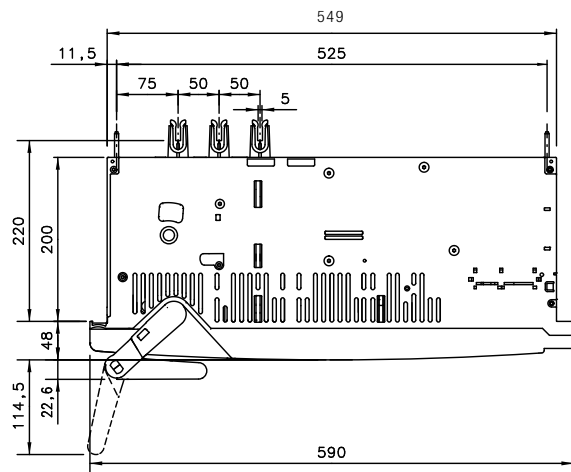


Distance between busbars (top view)

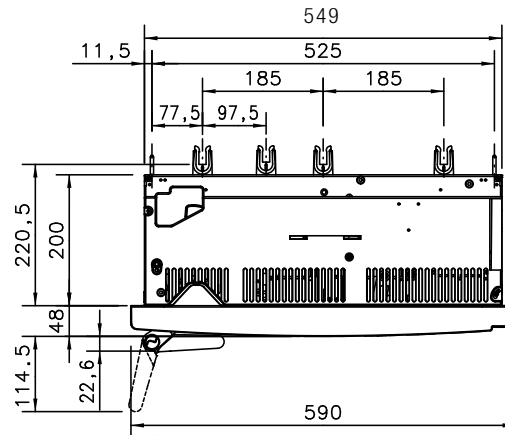
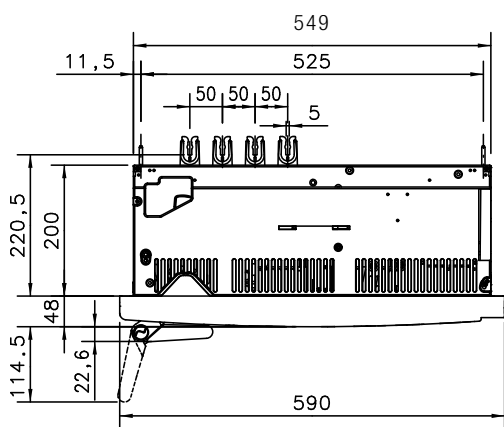
50 mm distance between phases

185 mm distance between phases

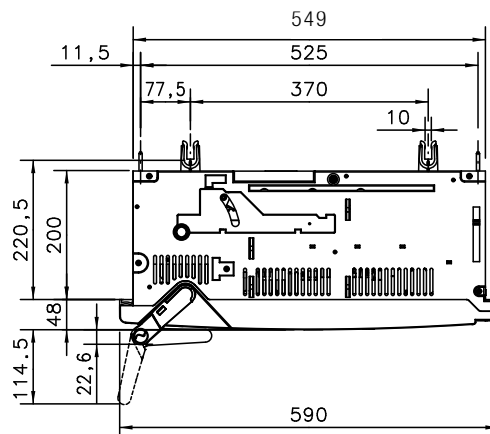
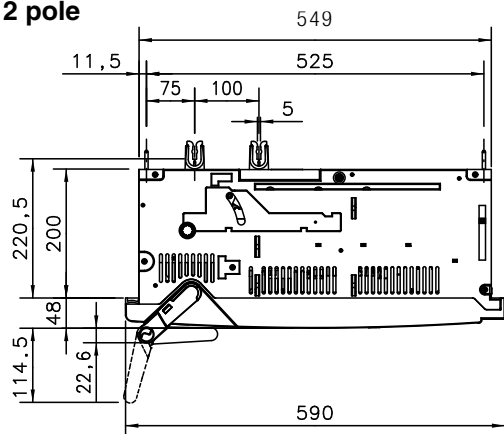
3 pole



4 pole



2 pole

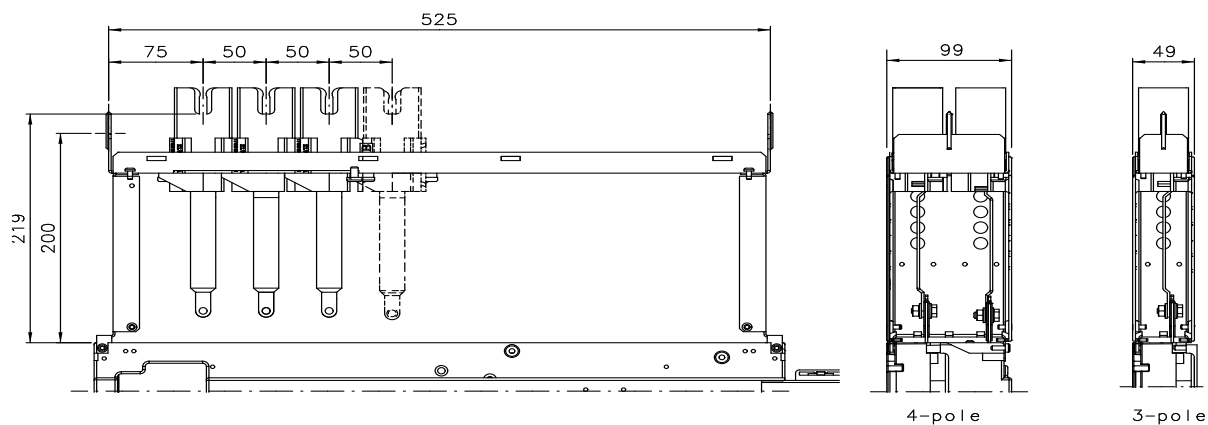


SlimLine

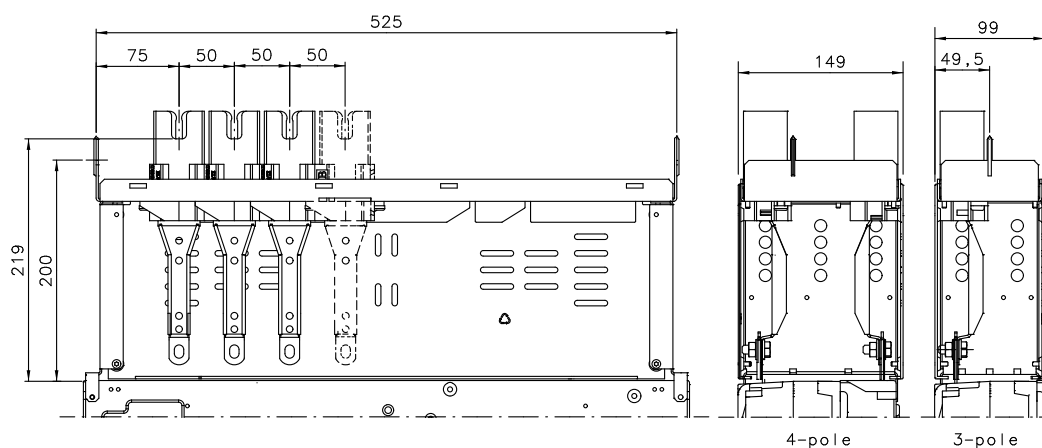
6. Dimensional drawings

Contact extension, 50 mm distance between phases

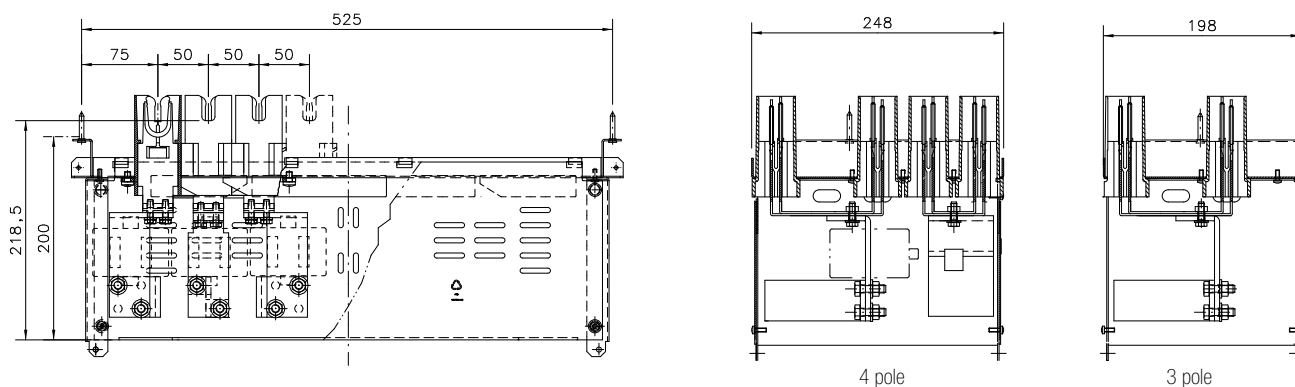
XR00



XR1

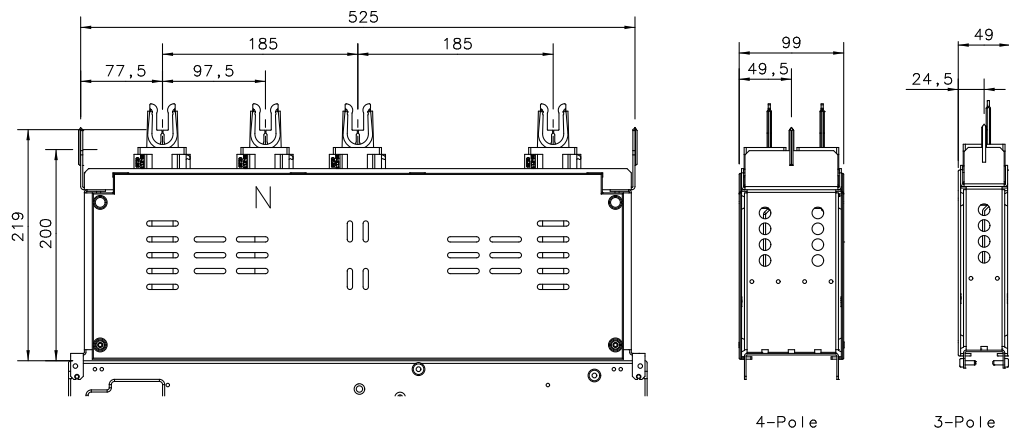


XR2/3

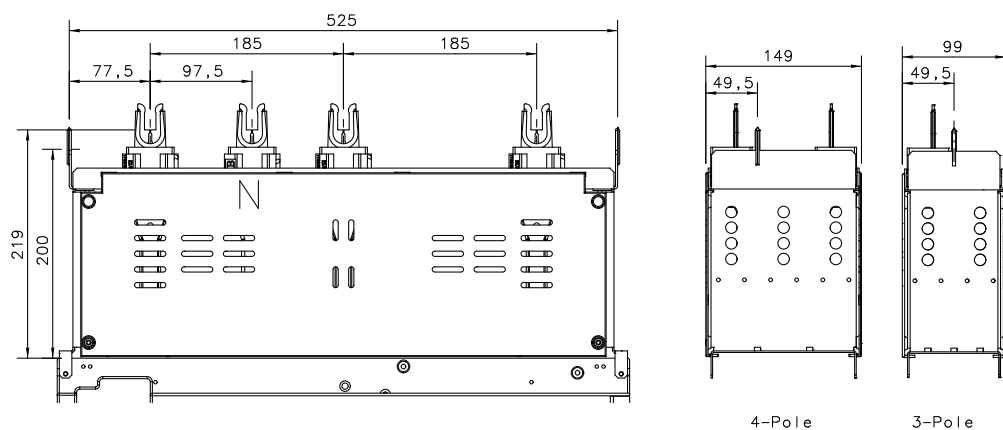


Contact extension, 185 mm distance between phases

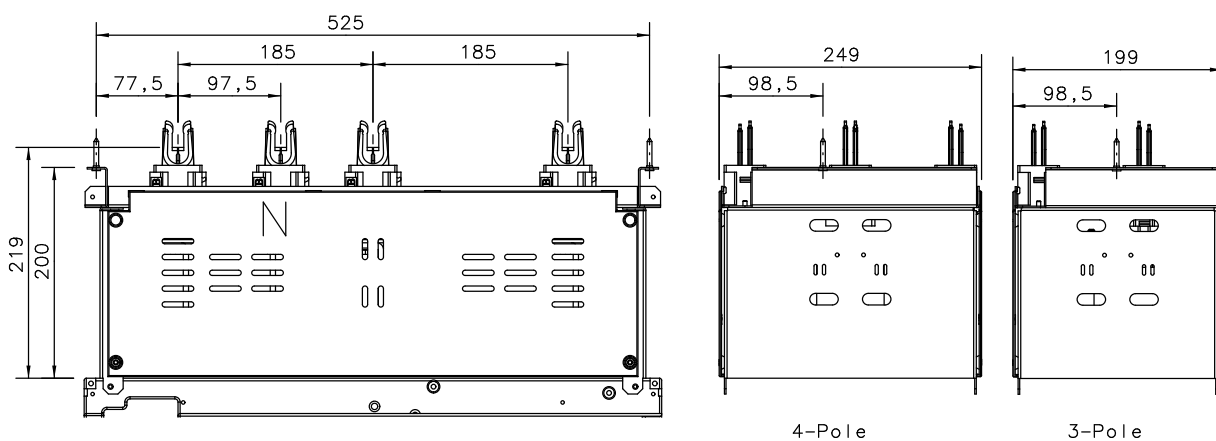
XR00



XR1

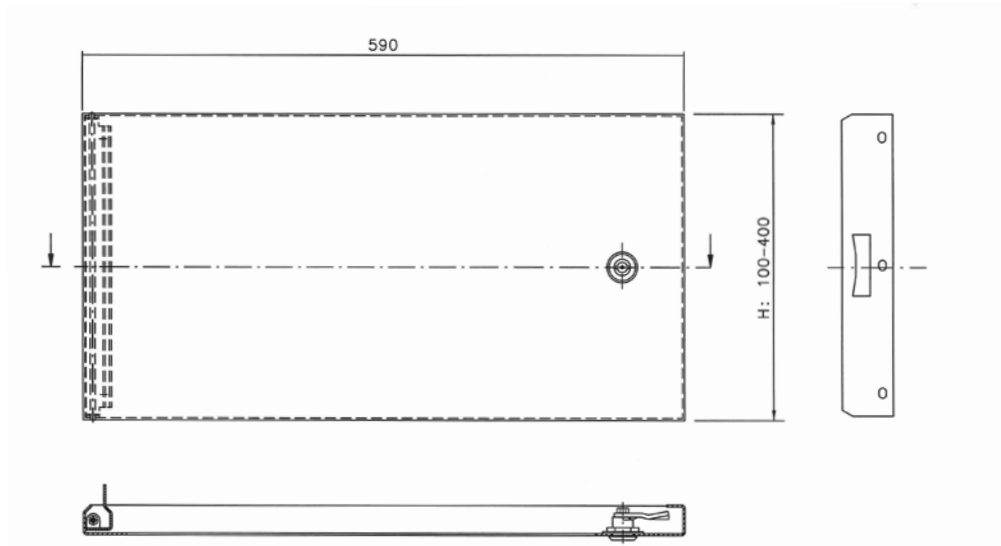


XR2/3

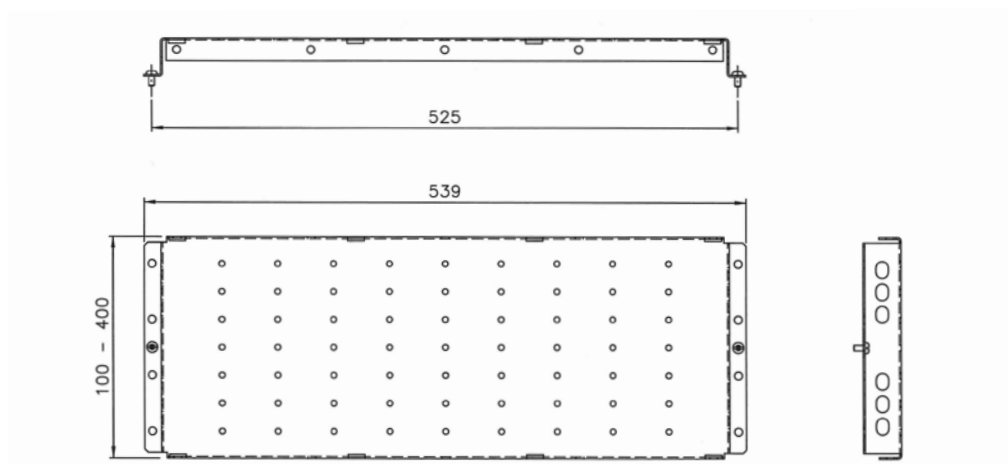


Service modul

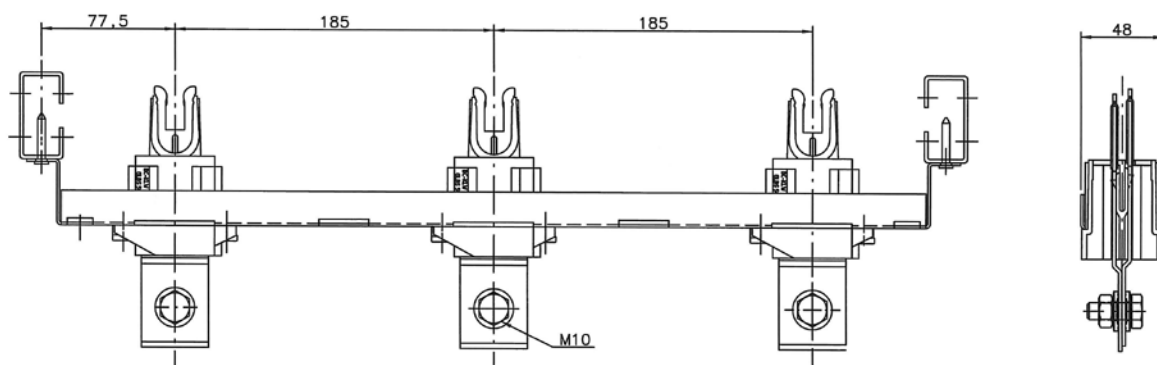
Blind cover complete H: 100-400 mm



Mounting plate H: 100-400mm

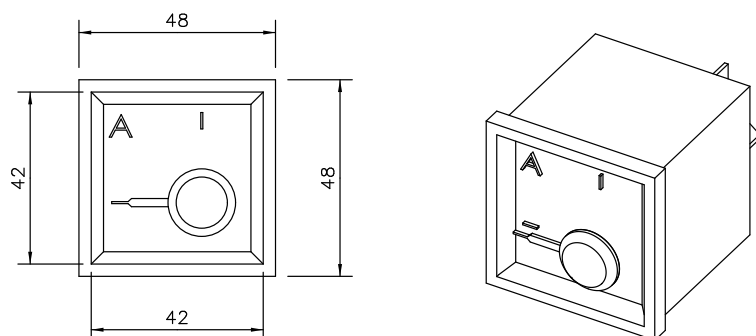


Busbar connection module 400 A, 185mm distance between busbars

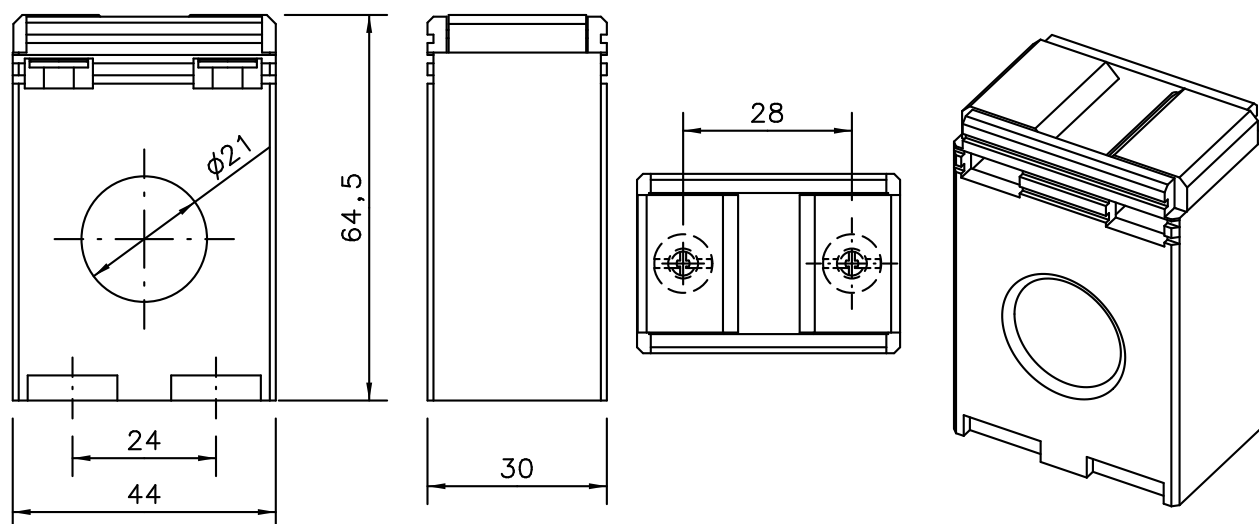


A-meters

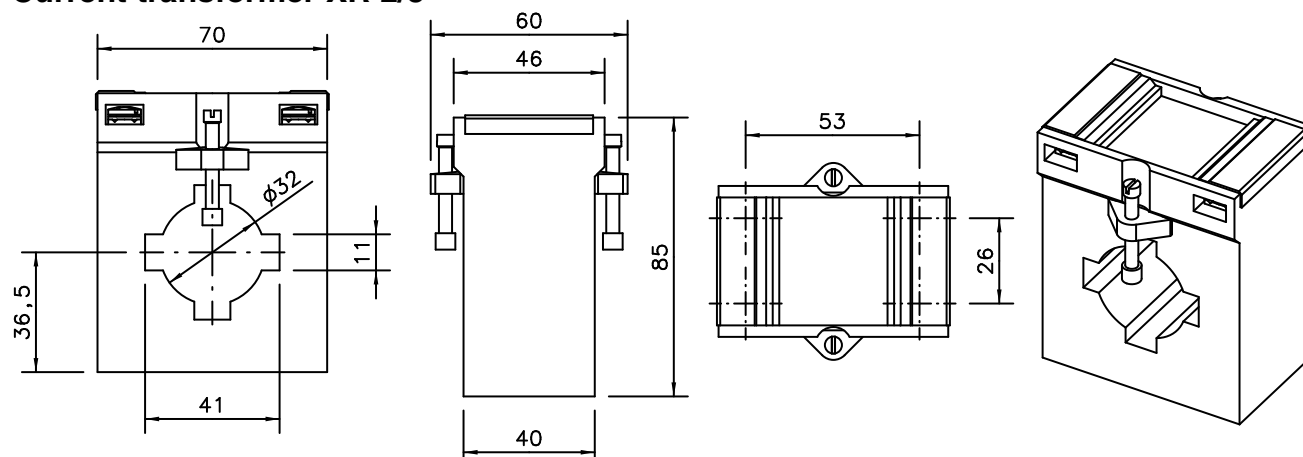
CEWE QB 48 maximum demand A-meters



Current transformer XR 00/1



Current transformer XR 2/3



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