

(EN)

Mounting instructions

invicta range

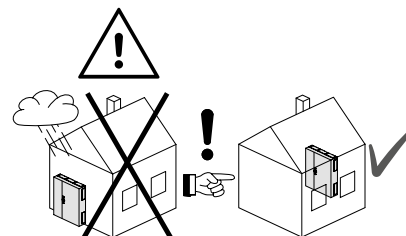
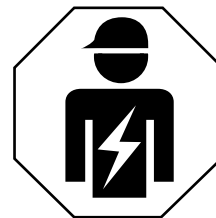
Safety instructions



Installation, modification and disassembly of the product may only be carried out by an authorised electrician in accordance with the relevant installation standards and safety regulations of the country. The final installation is to meet all rules as described in AS/NZS 3000:2018.

These instructions are an integral part of the product and must be kept for the entire lifetime of the product.

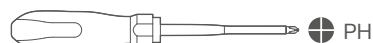
Please read these instructions carefully before starting any work and before using the product.



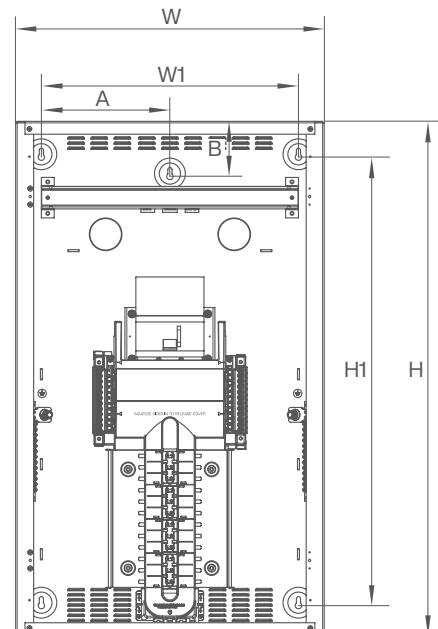
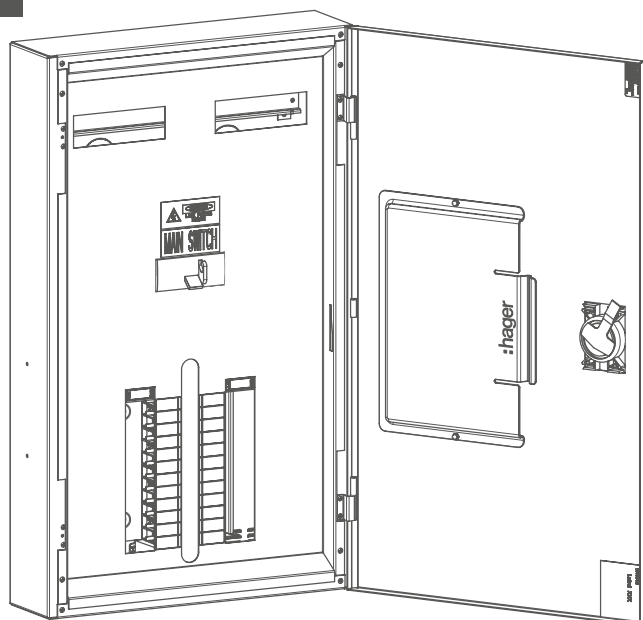
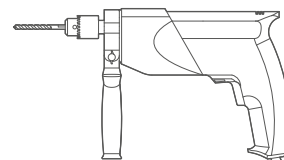
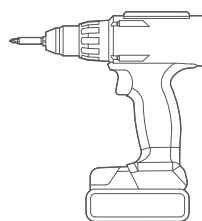
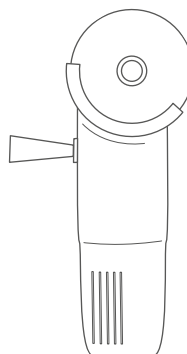
SL



PZ2



PH



JVCXX00SXXTW

Dimensions [mm]									
Market reference	Description	H	W	D	D1	W1 ^[1]	H1 ^[2]	A	B
JVC2400S16TW	160A 24 pole	800	480	141	136	400	698	200	75
JVC2400S25TW	250A 24 pole								
JVC3600S16TW	160A 36 pole	900							
JVC3600S25TW	250A 36 pole								
JVC4800S16TW	160A 48 pole	1000							
JVC4800S25TW	250A 48 pole								
JVC6000S16TW	160A 60 pole	1128							
JVC6000S25TW	250A 60 pole								
JVC7200S16TW	160A 72 pole	1235							
JVC7200S25TW	250A 72 pole								
JVC0EXTDW	Extension BOX	350							

^[1] Horizontal distance of fixing hole
^[2] Vertical distance of fixing hole

Mounting


The electrical contractor must ensure that the support structure or wall is adequate to support the weight of the panelboard.

All cables entering or exiting the switchboard are to be via a gland or sealed as required.

More an information under safety instructions, pls.add hereunder:

All panelboards have lockable doors suitable for restricted areas as per AS/NZS 61439.3:2016.

Installation of protection devices into the panelboard



Danger

Electric shock when live parts are touched!

An electric shock can lead to death!

- Isolate all connection cables before working on the device and cover any live parts in the area!

The electrical contractor is to ascertain that all installed devices are suitable to meet the appropriate fault current ratings required.

The chassis on this panelboard is suitable for Hager 6 kA and 10 kA type of MCBs and RCBOs and was designed to suit Hager MCBs only.

Hager recommends to use Hager approved switchgear only. Otherwise it may void warranty. If the fault level at the switchboard is higher than the MCB fault rating, they must be backed up by current limiting fuses or current limiting circuit breakers. For backup protection levels refer to Hager.

Devices are to be mounted with the DIN clip toward the centre of the enclosure. Transportation may cause terminations, mechanical supports and other connections to become loose. The electrical contractor has to ensure that all these connections are tightened prior to any energisation. No electrical equipment shall be put into use where its strength and capability may be exceeded in such a way as may give rise to danger.

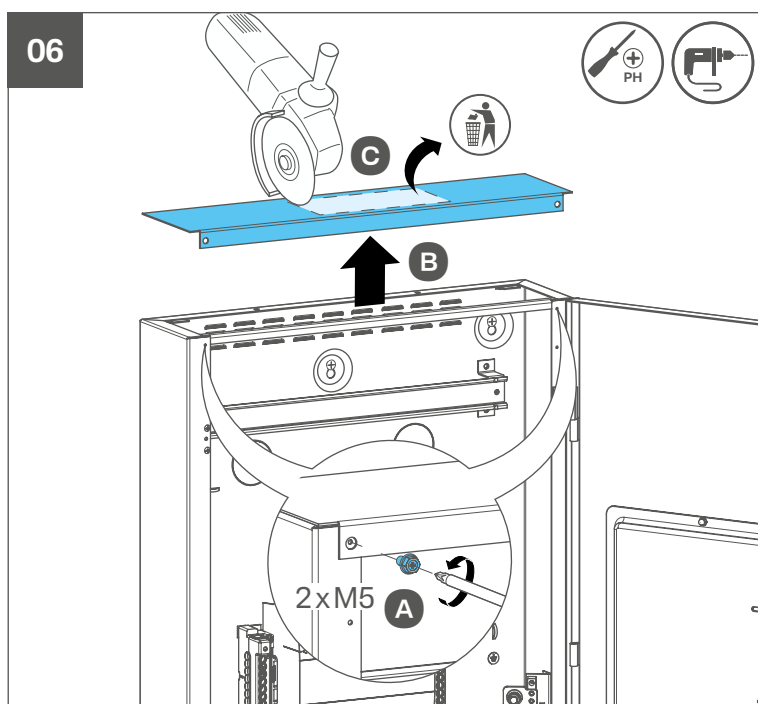
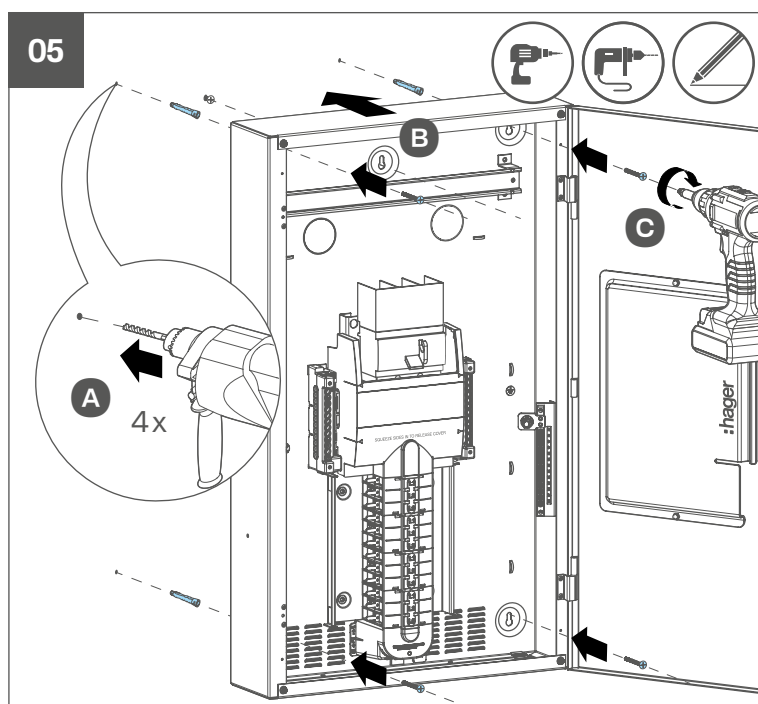
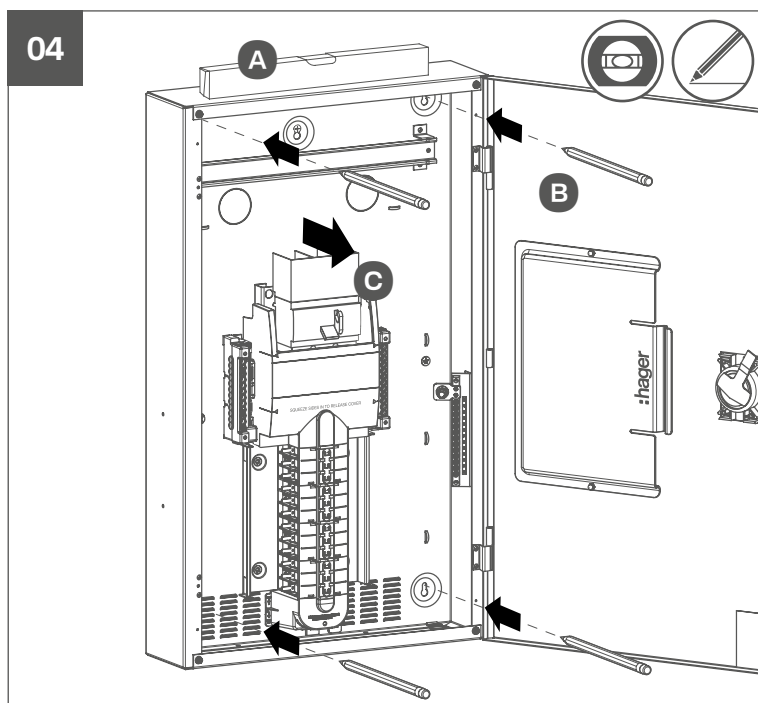
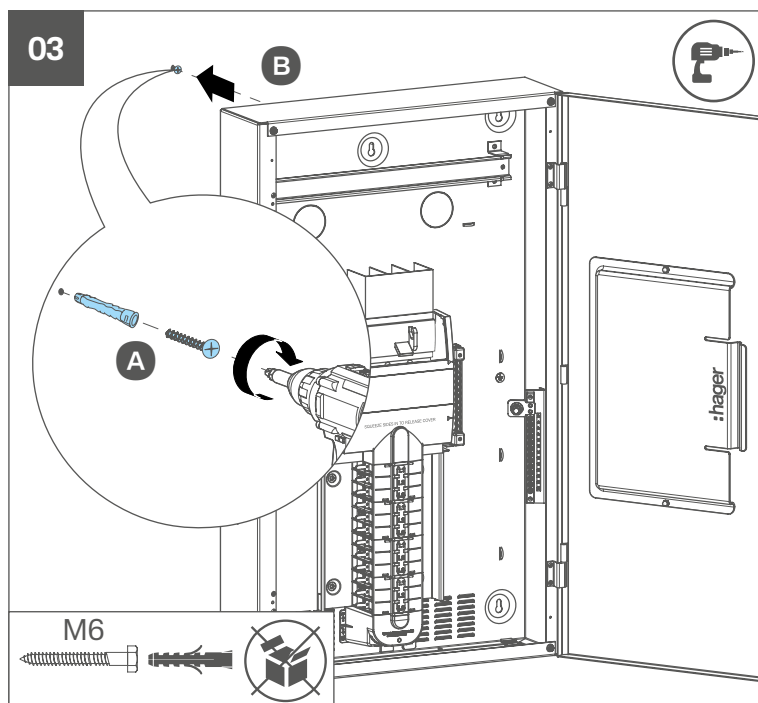
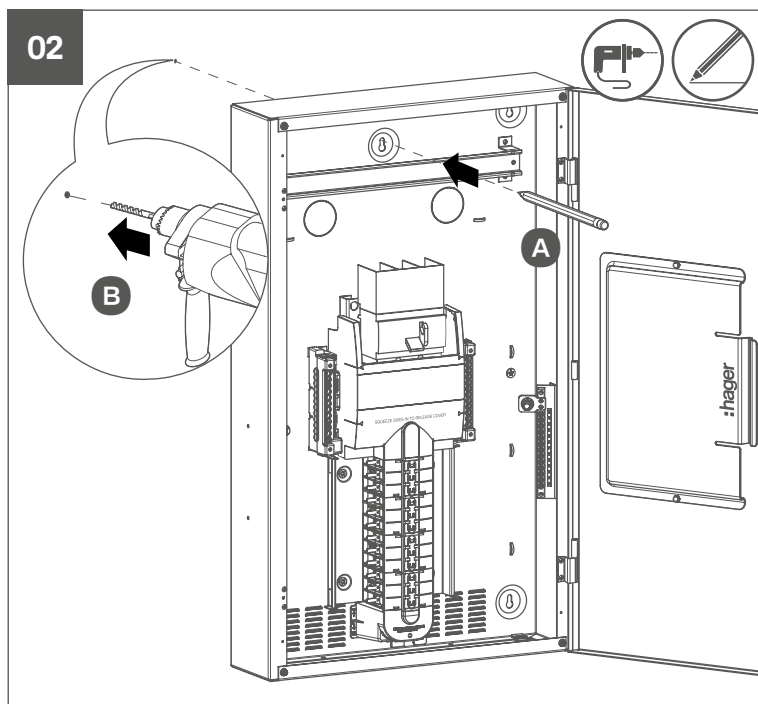
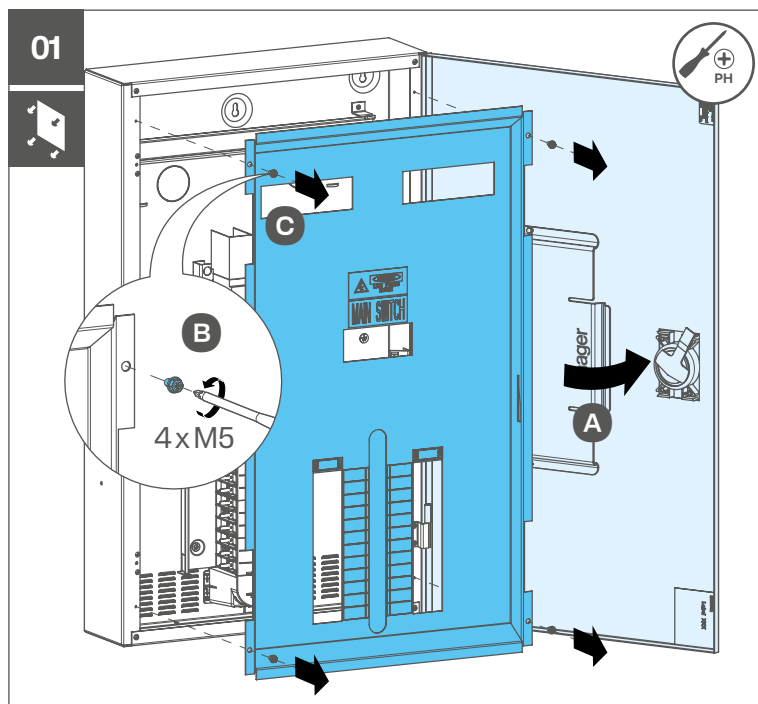
Torque Values for Connenctions	
MCB / RCCB	2,8 Nm
Switches	3,6 Nm
Spreader links (M5)	5 Nm
Main Neutral / Earth (M8)	10...13 Nm
Terminal Bar	2,5 Nm
Incomer JK161S	15...18 Nm
Incomer JK250S	15...18 Nm

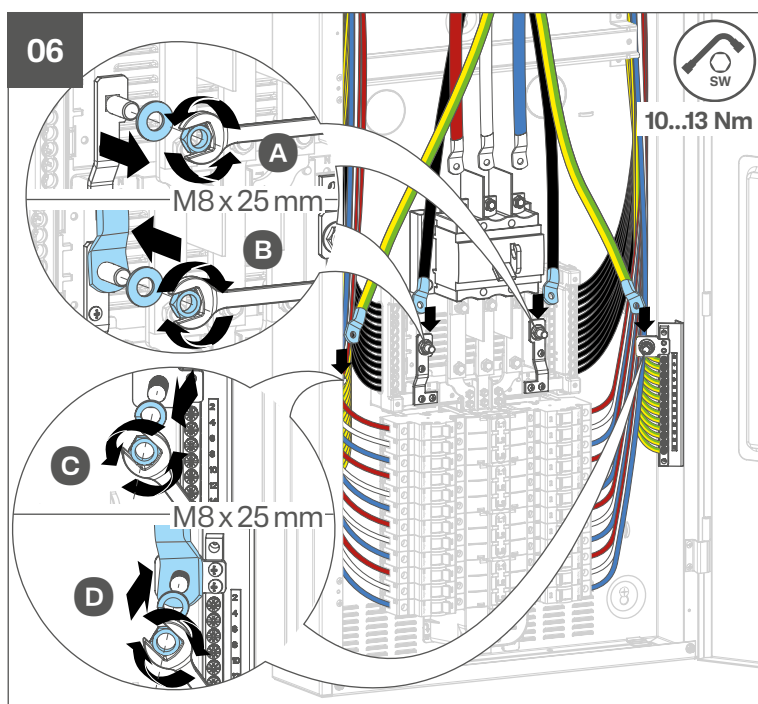
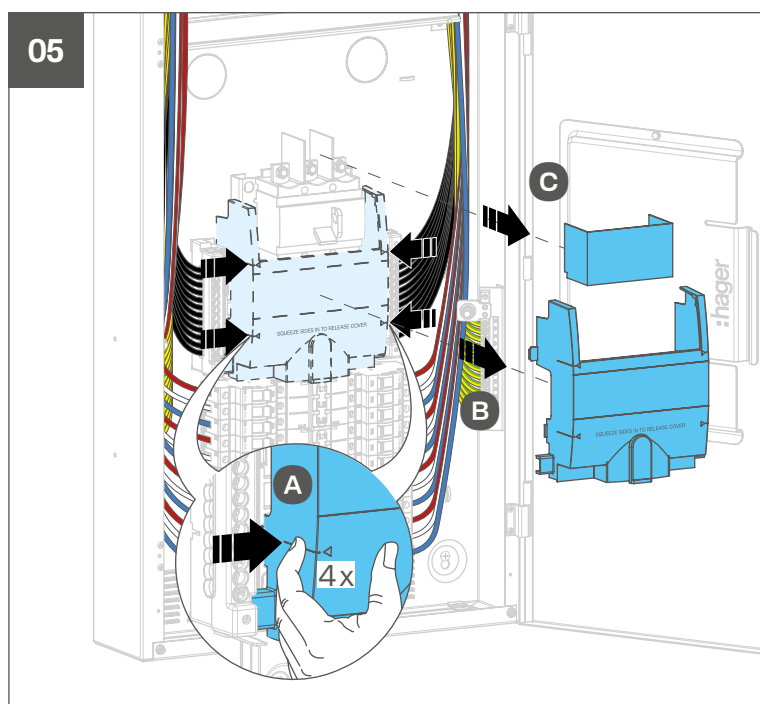
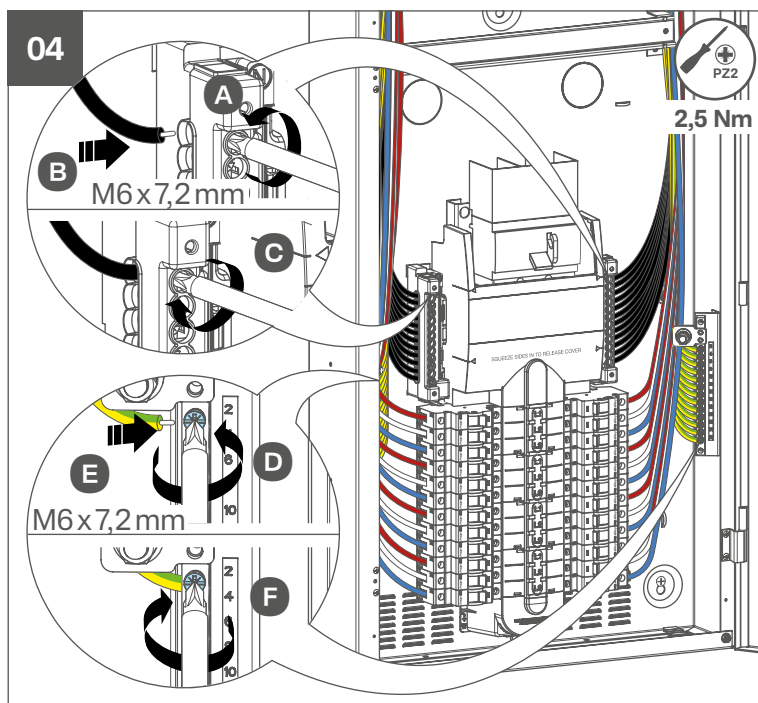
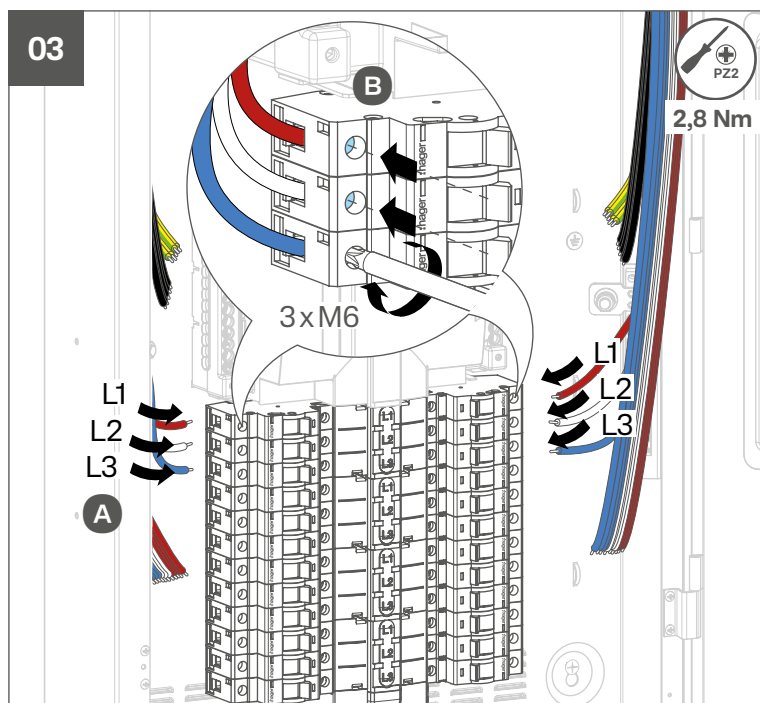
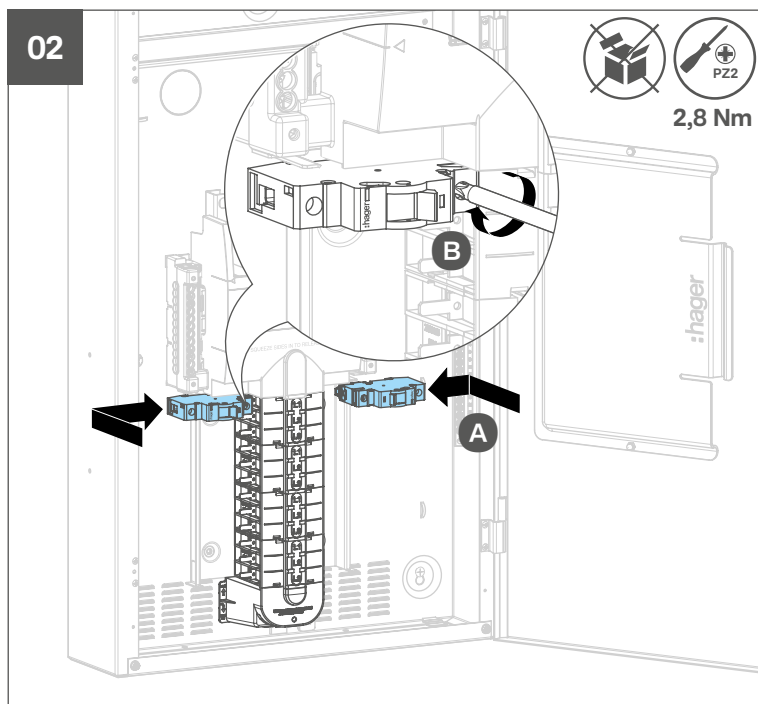
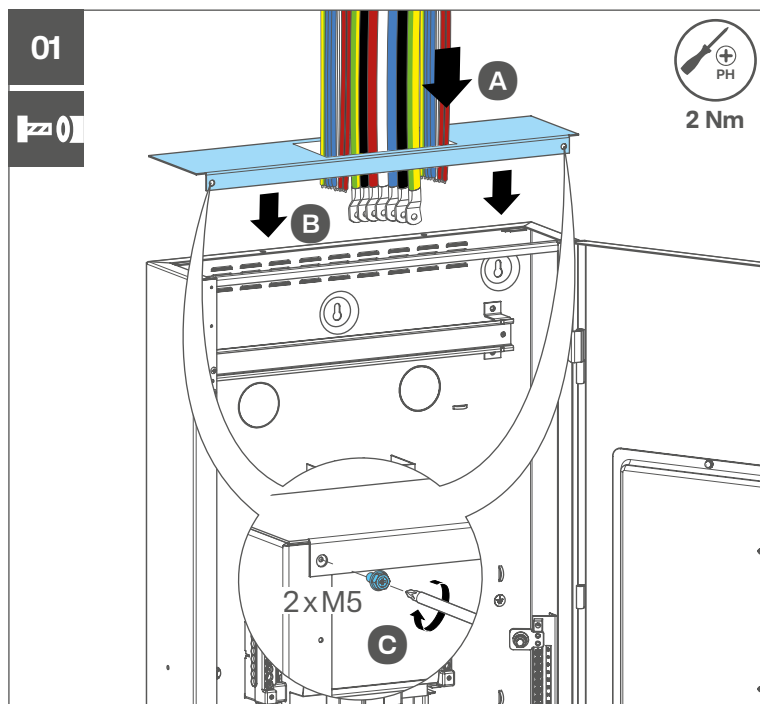
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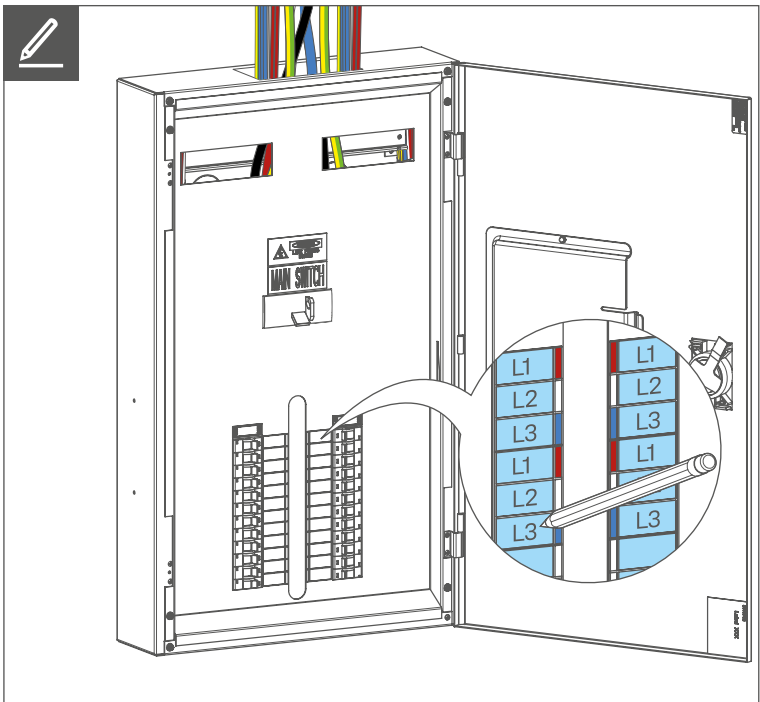
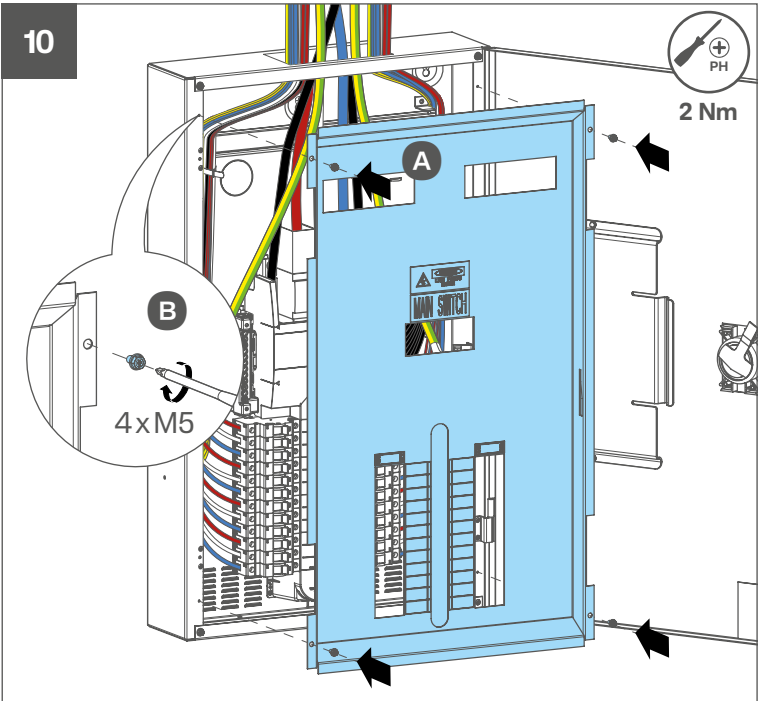
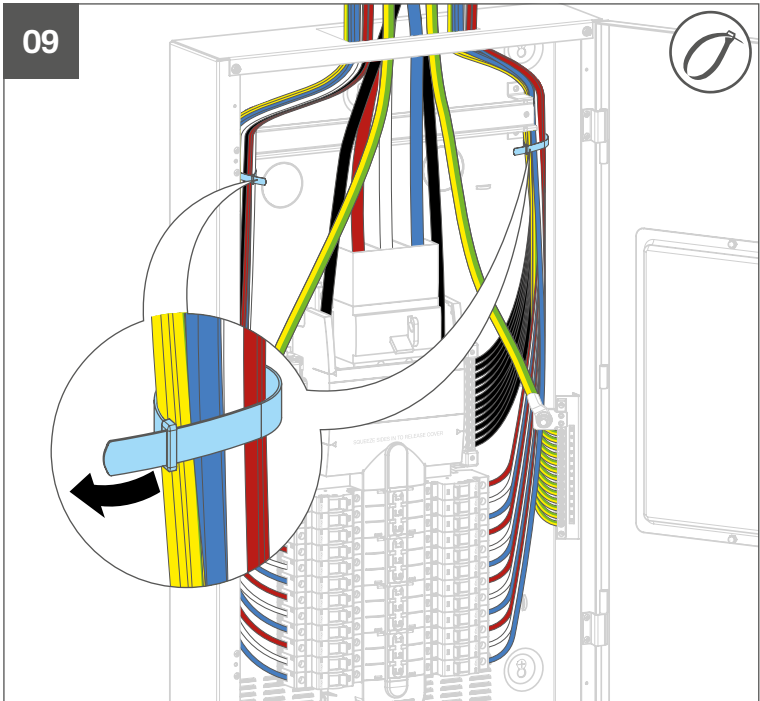
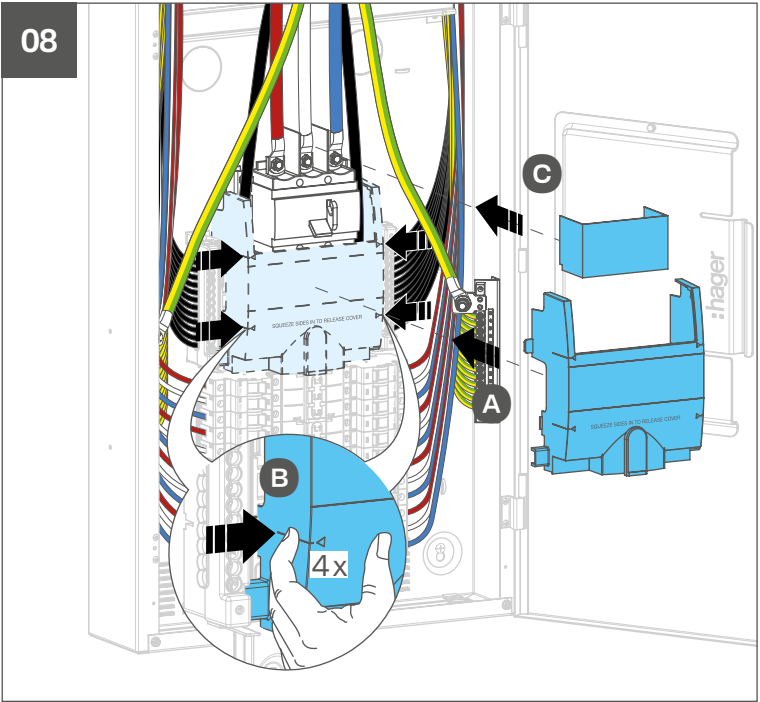
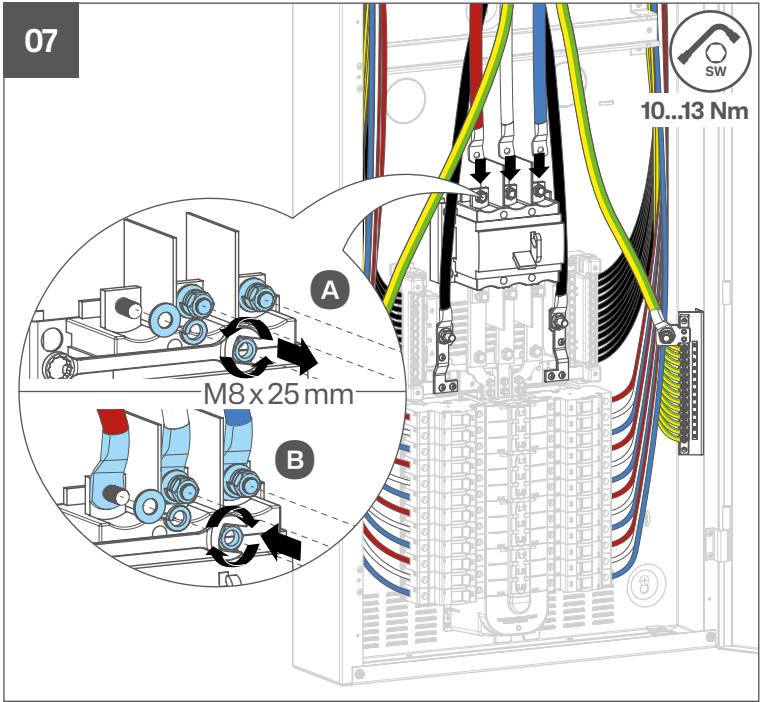
The panelboard is surface-mounted on the wall.
- Drill hole for desired cable gland through the gland plate or remove the gland plate to get a big hole for trunking.
 - Drill all needed holes at the top/ bottom or rear side for all outgoing cables.
 - Mount all needed MCB and RCBO's right and left at the busbar phases.
 - Wire the MCB and RCBO's to the installation outside the panelboard.
 - Connect the RCBO's neutral cable on the right and left terminal bar.
 - Connect the other neutral cables on the right and left terminal bar.
 - Connect the earthing cables on the right and left terminal bar.
 - Remove the cover on top of the busbar.
 - Connect incomer neutral cables on right or left terminal
 - Connect L1, L2, L3 terminals of the main switch with incomer cables.

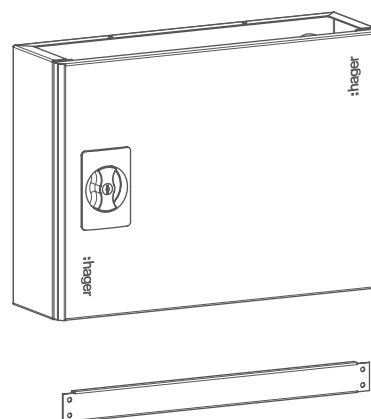
Before first operation

- Check the arrangement and alignment of all devices and ensure that all devices are undamaged and all connections are firmly tightened before the system is put into operation.
- After completing the installation, clean the panelboard and remove filings, material residues and other foreign objects.

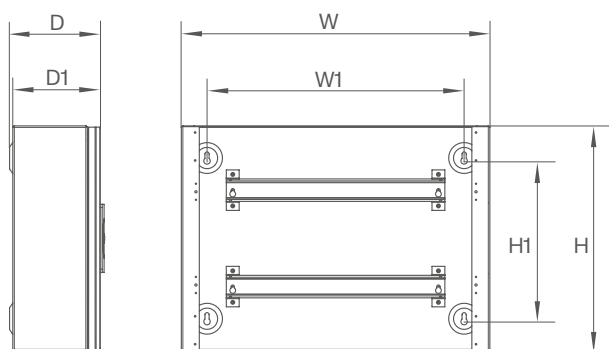






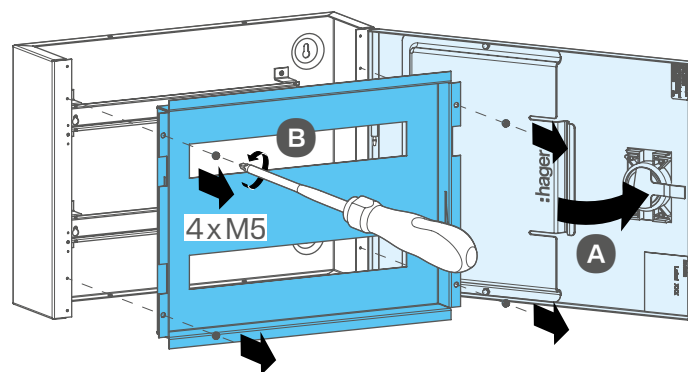


4 x M5

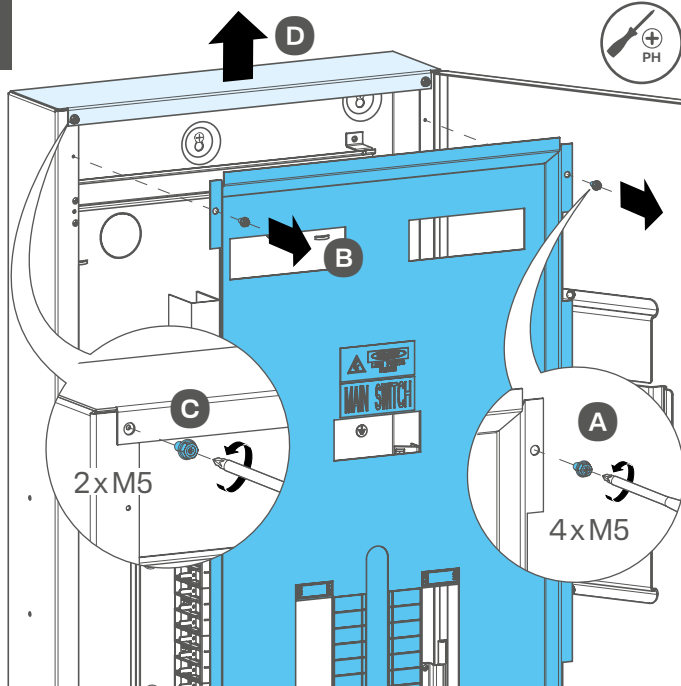


JVC0EXTDW

01



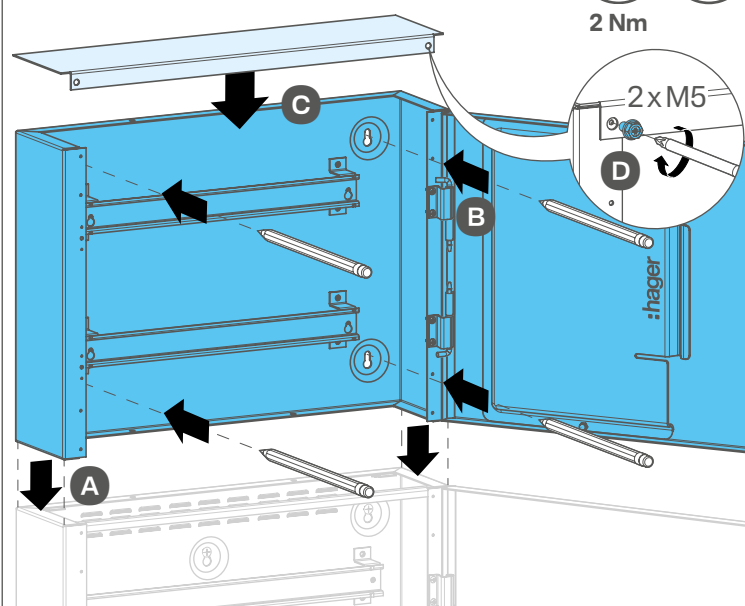
02



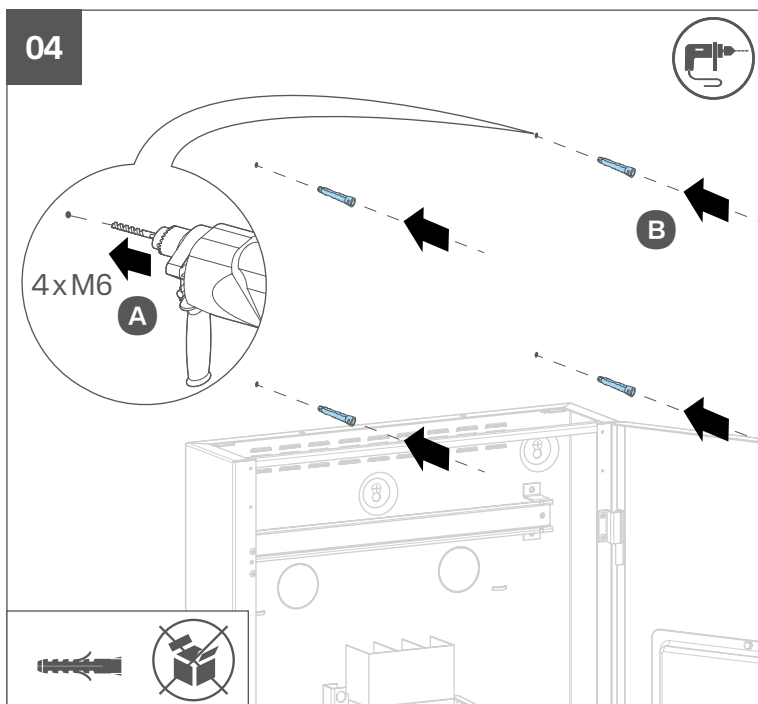
03



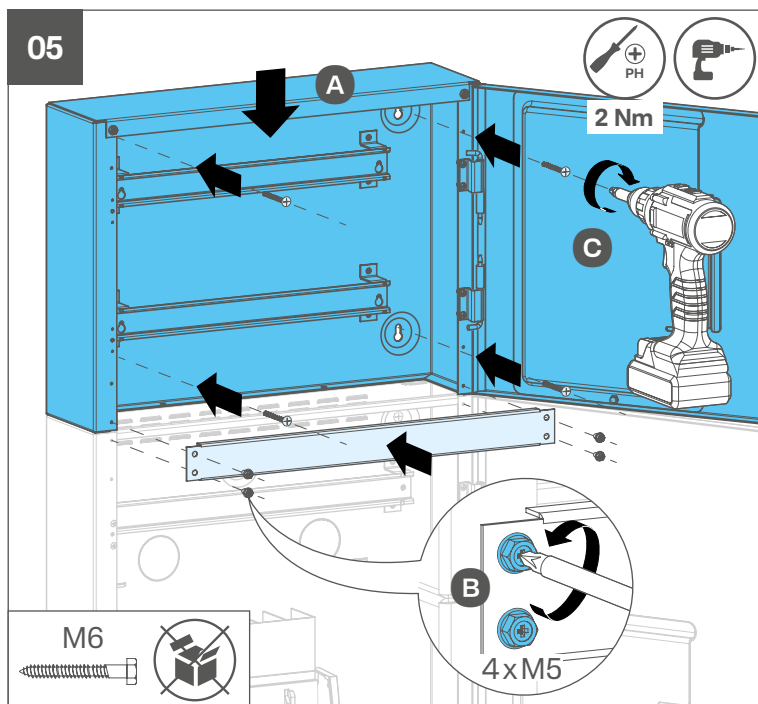
2 Nm



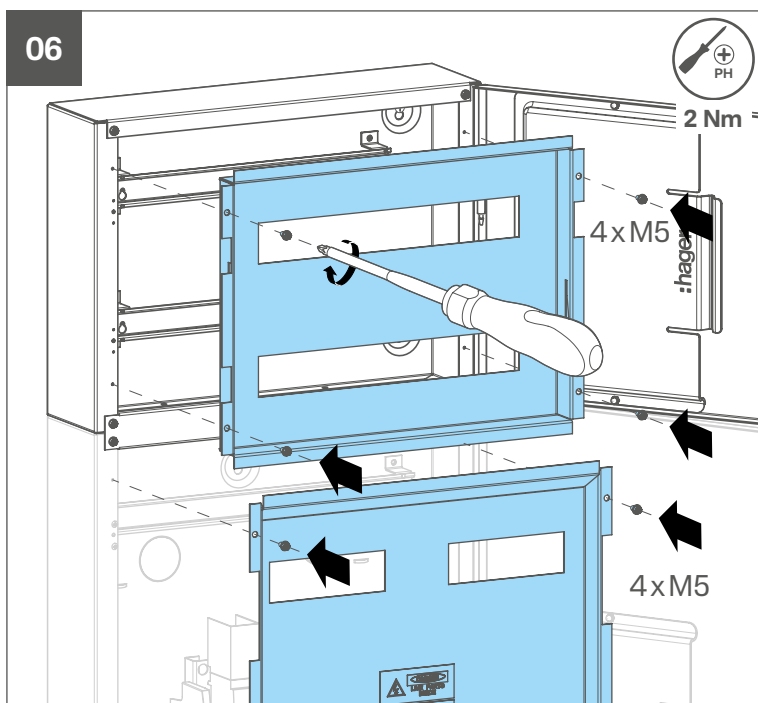
04



05



06



Technical data



Current rating		160 A					250 A				
MCB poles		24	36	48	60	72	24	36	48	60	72
IP rating (Door closed)		IP3x									
Material		1.2 mm galvanised steel									
Main incomers											
No switch fitted		Not an option									
160 A hager switch		Y	Y	Y	Y	Y					
250 A hager switch							Y	Y	Y	Y	Y
Electrical details											
Switchgear mounting		Rear studs									
Type testing		To AS/ NZS 61439.3:2016									
Rated voltage (U _n)		415 V AC, 50 Hz									
Rated insulation voltage (U _i)		690 V AC, 50 Hz									
Rated operational voltage (U _e)(fn)		415 V AC, 50 Hz									
Rated impulse voltage (U _{imp})		4 kV									
Rated current of the assembly (I _{nA})		160 A					250 A				
Rated current of an outgoing circuit (I _{nc})		MCB 6 kA C-curve: 6...63 A (rated current on device)									
		MCB 10 kA C-curve: 2...63 A (rated current on device)									
		MCB 6 kA “D” curve: 6 A...63 A (rated current on device)									
		MCB 10 kA “D” curve: 6 A...63 A (rated current on device)									
		RCBO 6 kA “C” curve 30 mA: 6 A...45 A (rated current on device)									
		RCBO 6 kA “C” curve 10 mA: 6 A...32 A (rated current on device)									
		RCBO 10 kA “C” curve 30 mA: 6 A...32 A (rated current on device)									
		RCBO 3M 3P+N 6 kA “C” curve 30 mA: 10 A...63 A (rated current on device)									
		RCBO 3M 3P+N 6 kA “D” curve 30 mA: 10 A ...63 A (rated current on device)									
		RCBO 3M 3P+N 10 kA “C” curve 30 mA: 10 A...63 A (rated current on device)									
	RCBO 3M 3P+N 10 kA “D” curve 30 mA: 10 A...63 A (rated current on device)										
Rated short-circuit withstand current of the assembly (I _{cu})		20 kA/ 0.2 s, 40 kA peak									
Rated conditional short-circuit current of the assembly (I _{cc})		10 kA ^[1] with equipment and arrangements specified in Hager’s technical documentation/ catalogue									
Rated diversity factor (RDF) /Values of assumed loading		18 pole - 24 pole = 0.6									
		36 pole and above = 0.5 RDF									
		Note: RDF only applies to continuously and simultaneously loaded circuits									
Types of system earthing for which the assembly is designed		TNC-S, TN-S and TT when installed in an electrical system conforming to AS/ NZS3000									
Electromagnetic compatability (EMC) classification		EMC environment B									
Protection against electric shock		DBO shall be installed in an electrical system conforming to AS/ NZS3000									
Door											
Key lockable		Yes (CL001)									
Circuit schedule card		Yes									
N terminals											
Tunnel terminal		Ø = 7.2 mm					(Copper strands bended firmly)				
Solid conductors		1.5 mm ²					(unprepared)				
		2.5 ... 25 mm ²					(Copper strands must be firmly twisted together)				
Stranded conductors		1.5 ... 2.5 mm ²					(using a tool i.e.pliers, then firmly bended)				
							(Copper strands must be firmly twisted together)				
		4 ... 6 mm ²					(Copper strands must be firmly twisted together)				
							(using a tool i.e.pliers)				
		10 ... 25 mm ²					(unprepared)				
Flexible conductors		2.5 ... 16 mm ²					(Bootlace ferrules to be used)				
Enclosure details											
Height (mm)		800	900	1000	1128	1235	800	900	1000	1128	1235
Width (mm)		480									
Depth (mm)		135									
Spare DIN rail space (poles)		16									
Gland plates		Galvanised steel									
Colour		RAL7035 (light grey)									
External design		Wall-mounted, surface type, enclosed assembly									
Mechanical impact protection		Ik05									
Pollution degree		2									
Type of construction		Type B DBO, fixed parts									
Intended use		To be used by ordinary persons in an indoor stationary assembly only.									

^[1] Current limitation characteristics specified in Hager's technical documentation/ catalogue.