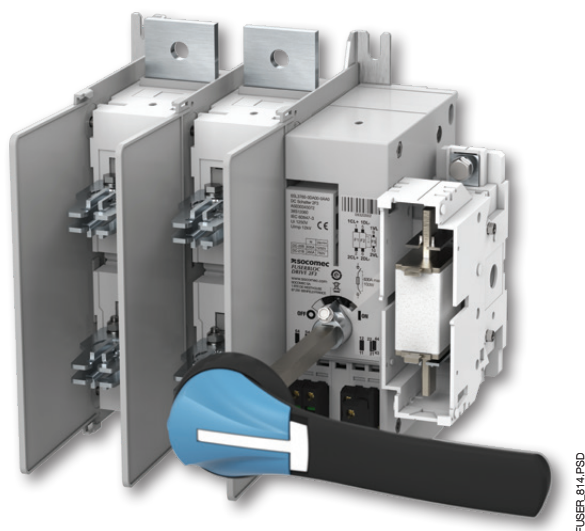


FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives
from 600 to 1700 A



The solution for

- > Energy
- > Industry

Strong points

- > Simple and compact
- > Automatic pre-charging
- > Optimised maintenance
- > Optimised safety

Conformity to standards

- > IEC 60947-3
- > UL98

Function

FUSERBLOC DRIVE units with manual front operation are multipole DC fuse load break switches. They offer overcurrent protection for all low-voltage electrical circuits of capacitive loads (capacitor) by limiting the high inrush current during circuit power-up and are designed to allow maintenance work on DC/AC variable speed drives or PV inverters without shutting down the entire installation. The range is available in direct and external operation, with 2 power poles + 1 pre-charge pole, up to 1700 A.

Advantages

Simple and compact

The FUSERBLOC Drive unit is the most compact and simple solution in the market for variable speed drives under a common DC bus. This product combines 3 functions, namely disconnection, protection and precharging in one and the same device.

Automatic pre-charging

After servicing operations, pre-charging of inverter capacitors is managed automatically via a coil. Further, the opening of the precharging poles and closing of the power poles is also carried out automatically.

Optimised maintenance

This multifunction device enables maintenance work to be done on part of the power system while leaving the rest of the equipment powered on.

Optimised safety

Double phase isolation (upstream/downstream from the fuse), disconnection and padlocking keep personnel completely safe while replacing a fuse. The device is capable of maintaining the OFF, pre-charge or ON position in the event of power failure.

General characteristics

- For high-speed fuses up to 1700 A.
- Up to 1250 VAC, 1000 VDC.
- Up to 100 kA.
- Utilisation category DC 20B.
- 2 power poles + 1 pre-charge pole.

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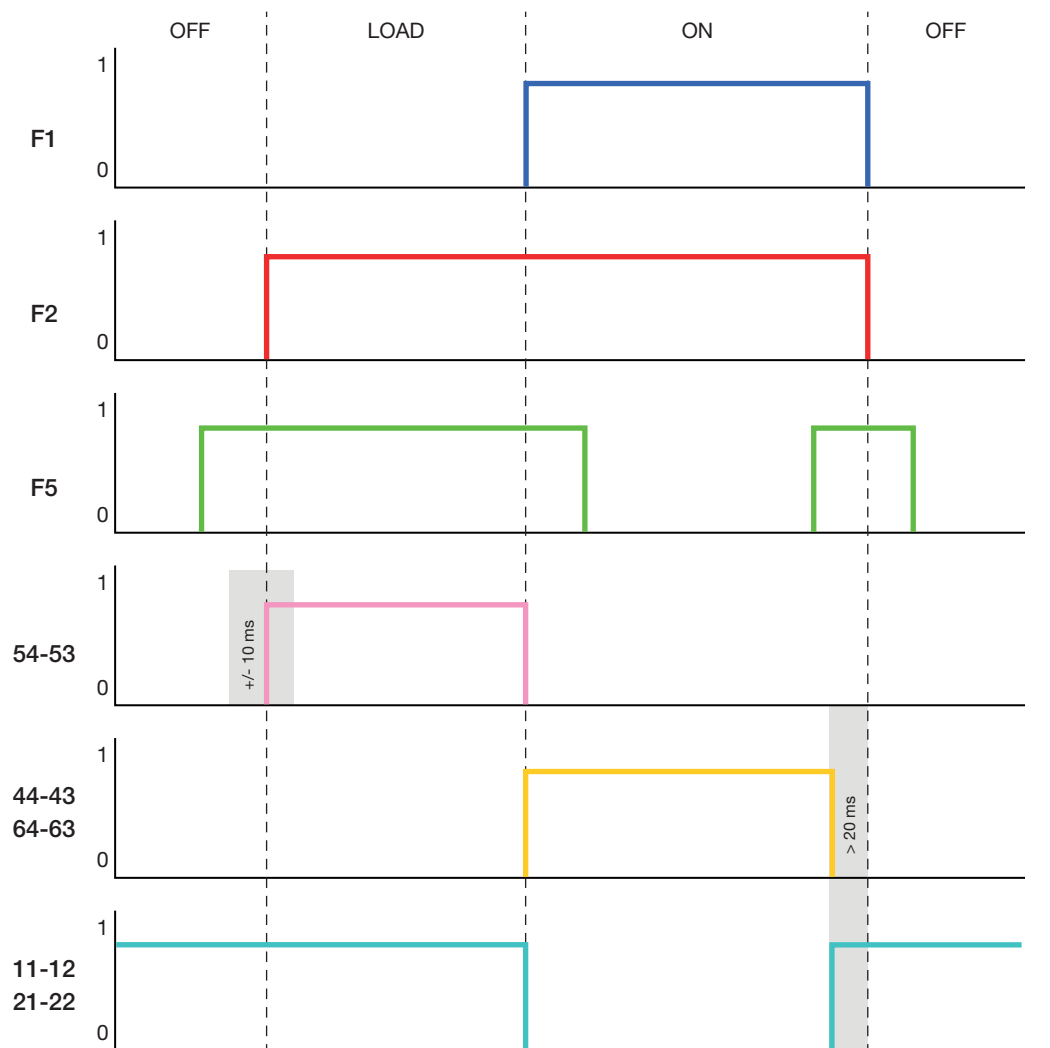
References

External / direct operation 600 to 1700 A

Rating (A)	Frame size	Main poles			Pre-charge poles			Reference	"External front handle"	"Shaft for external front handle"	Coil	"Auxiliary contacts"
		No. of poles	Fuse size	Fuse type	No. of poles	Fuse size	Fuse type					
630 A	2F3	2	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 2060	1433 3111	1402 1240	Pre-mounted (24VDC)	Pre-mounted 3NO+2NC
800 A	2F4	2	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 2080				
1200 A	2x2F3	4 (2//)	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 4100				
1700 A	2x2F4	4 (2//)	Size 3	KN/110 or DIN 43620	1	Size 0	DIN 43620	38S1 4160				

Operating diagram

Main poles and auxiliary contacts

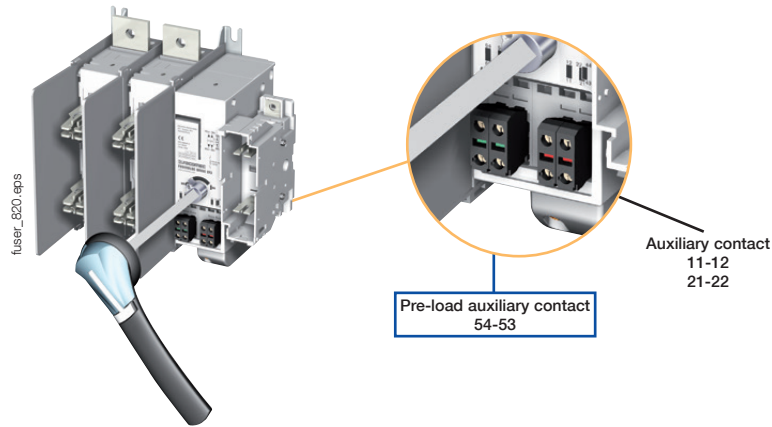


FUSERBLOC DRIVE 1PP

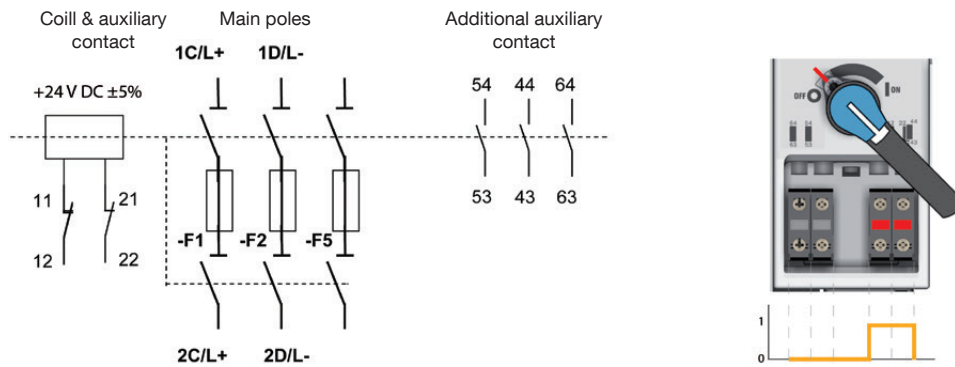
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Operating diagram

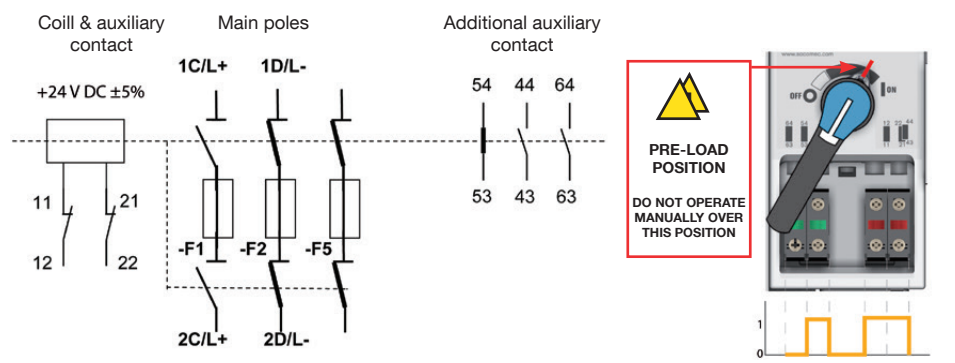
Main poles and auxiliary contacts



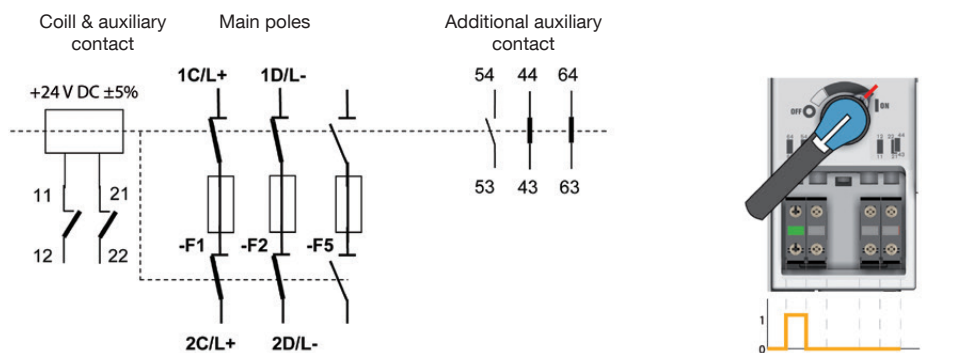
MANUAL - Step 1



MANUAL - Step 2



AUTO - Step 3



Characteristics according to IEC 60947-3

600 to 1600 A

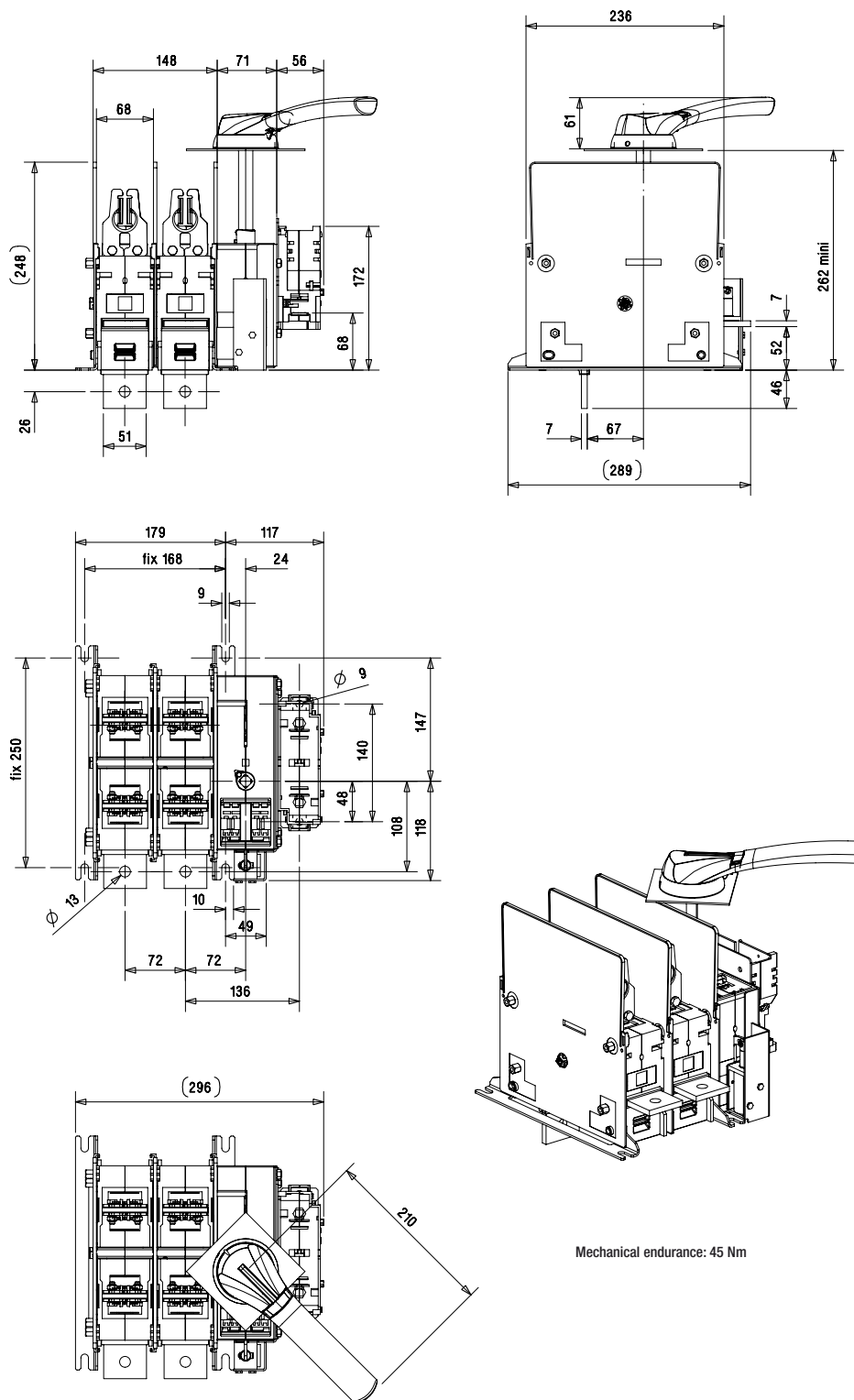
Rating (A)	630	800	1200	1700
References	38S1 2060	38S1 2080	38S1 4100	38S1 4160
Frame size	2F3	2F4	2x2F3	2x2F4
Main poles				
No. of poles	2	2	4(2//)	4(2//)
Thermal current I _{th} at 40°C (A)	630	800	1200	1700
Fuse DIN size	Size 3	Size 3	Size 3	Size 3
Fuse type	KN/110 or DIN 43620	KN/110 or DIN 43620	KN/110 or DIN 43620	KN/110 or DIN 43620
Rated voltage U _e (V)	1035	1035	1035	1035
Rated insulation voltage U _i (V)	1250	1250	1250	1250
Rated impulse withstand voltage U _{imp} (kV)	12	12	12	12
Load duty category	DC-20B	DC-20B	DC-20B	DC-20B
Prospective short-circuit current (kA rms)(1)	35	35	35	35
Maximum switch heat dissipation per pole (W)	100	130	100	165
Mechanical characteristics				
Coil voltage ± 5% (V DC)	24	24	24	24
Operating force (Nm)	45	45	45	60
Heat dissipation per pole (W)	149	300	/	/
Endurance (number of operating cycles)	1000	1000	1000	1000
Coil maximum current under 24 VDC (with coil of 400 W) ± 10% (A)	15	15	15	15
Pre-charge poles				
No. of poles	1	1	1	1
Thermal current I _{th} at 40°C (A)	160	160	160	160
Fuse DIN size	Size 0	Size 0	Size 0	Size 0
Fuse type	DIN 43620	DIN 43620	DIN 43620	DIN 43620
Rated insulation voltage U _i (V) (operation circuit)	1000	1000	1000	1000
Rated impulse withstand voltage U _{imp} (kV) (operation circuit)	8	8	8	8
Load duty category	DC-20B	DC-20B	DC-20B	DC-20B
Prospective short-circuit current (kA rms)(1)	20	20	20	20
Maximum switch heat dissipation per pole (W)	23	23	23	23
Mechanical characteristics				
Endurance (number of operating cycles)(2)	1500	1500	1500	1500
Operating force (Nm)	45	45	45	60
Maximum connexion capacity per pole (mm ²)	95	95	95	95
Minimum connexion capacity per pole (mm ²)	50	50	50	50
Coil				
Coil	Pre-mounted (24VDC)	Pre-mounted (24VDC)	Pre-mounted (24VDC)	Pre-mounted (24VDC)
U _e (VDC)	24	24	24	24
Rated insulation voltage U _i (V)	1000V	1000V	1000V	1000V
I _e (A) for 400W coil	15	15	15	15
Maximum power	400W	400W	400W	400W
Auxiliary contacts				
Auxiliary contact type	3NO+2NC	3NO+2NC	3NO+2NC	3NO+2NC
Thermal current I _{th} at 40°C (A)	10A	10A	10A	10A
Rated Operating Current I _e	5A	5A	5A	5A
Rated voltage U _e (V)	240VAC/24VDC	240VAC/24VDC	240VAC/24VDC	240VAC/24VDC
Load duty category	AC15/DC-13	AC15/DC-13	AC15/DC-13	AC15/DC-13
Approvals & Conformity				
Approvals and certifications	IEC-CCC	IEC-CCC	IEC-CCC	IEC-CCC
Conformity to standards	GB/T14048-3	GB/T14048-3	GB/T14048-3	GB/T14048-3
	IEC60947-3	IEC60947-3	IEC60947-3	IEC60947-3

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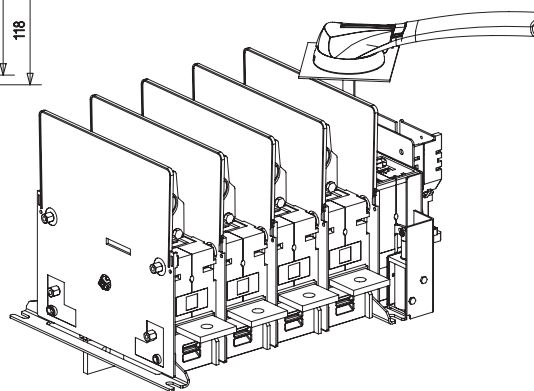
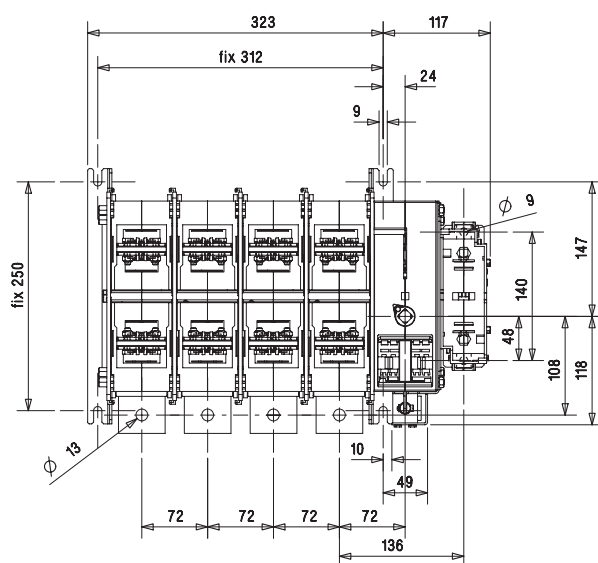
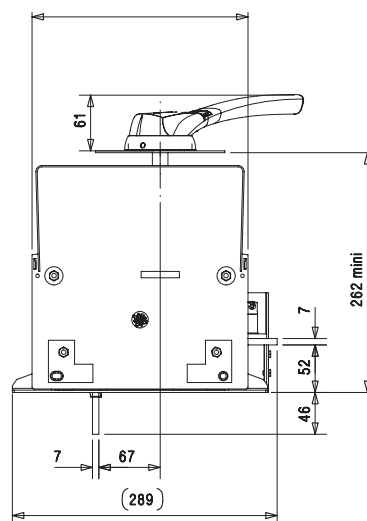
Dimensions

DC switches 600 A

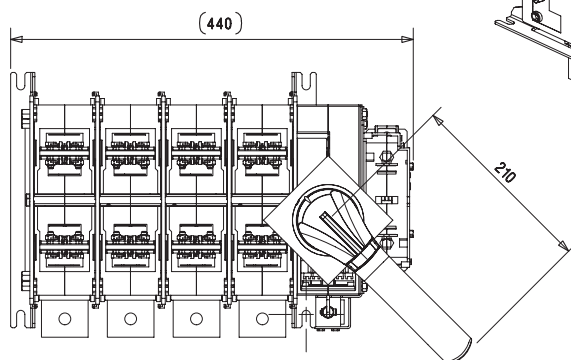


fuser_675_a_1_gb_cat.eps

from 600 to 1700 Å



Mechanical endurance: 45 Nm

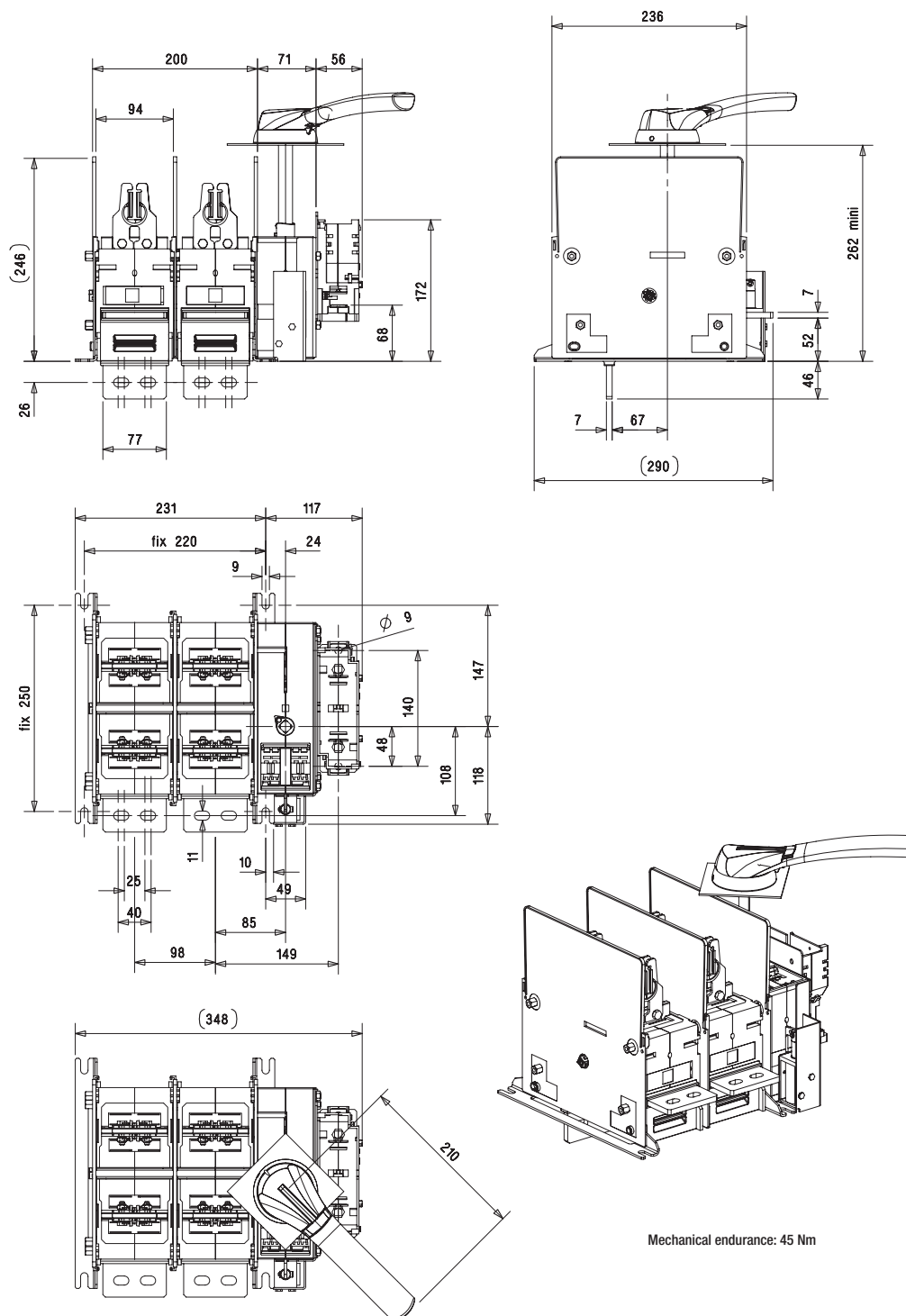


FUSERBLOC DRIVE 1PP

Single-pole pre-charge fuse combination switches for variable speed drives
from 600 to 1700 A

Dimensions

DC switches 800 A



fuser_676_a_1_gb_cetaps

from 600 to 1700 Å

Mechanical endurance: 60 Nm