

# FUSERBLOC

Fuse combination switches  
for industrial fuses up to 1250 A



fuser\_548\_a\_1\_cat

**FUSERBLOC**  
from 630 to 1250 A



fuser\_539\_a\_1\_cat

**FUSERBLOC**  
from 25 to 32 A



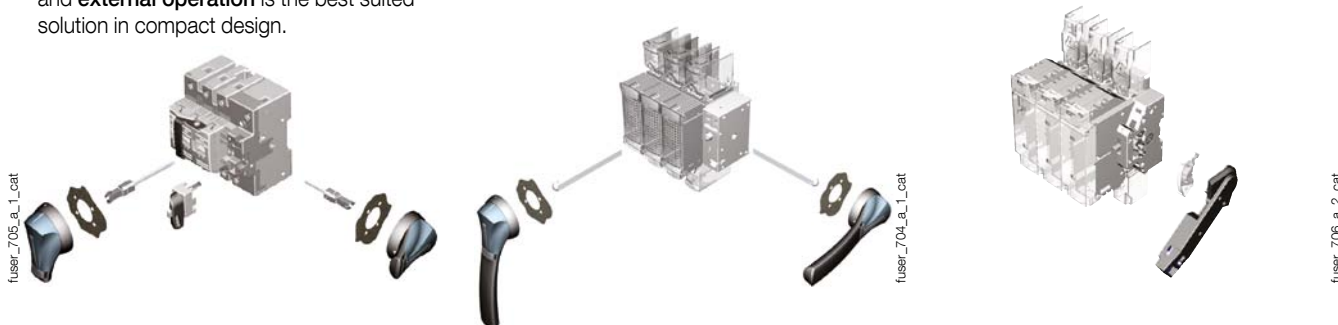
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**FUSERBLOC**  
from 32 to 400 A

## Function

**FUSERBLOC** are manually operated multipolar fuse combination switches. They make and break on load and provide safety isolation and protection against overcurrent for any low voltage electrical circuit.

- Whether it is 3 pole + switched neutral or 3 pole + solid neutral, the **FUSERBLOC** 25 to 32 A with **direct front operation** and **external operation** is the best suited solution in compact design.
- From 630 to 1250 A, the **FUSERBLOC** allows **direct** and **external front left or right side operation** in 2, 3 or 4 poles.
- From 50 to 400 A, the **FUSERBLOC** is available in 2, 3 or 4 poles with **direct right side operation**.



fuser\_705\_a\_1\_cat

fuser\_704\_a\_1\_cat

fuser\_706\_a\_2\_cat

## References

Rating (A)	No of poles	Frame size	Direct operation		External front and right side operation		
			NFC/DIN Reference	BS88 Reference	Frame size	NFC/DIN Reference	BS88 Reference
up to CD 32	3 P	0	3631 3***	3641 3***	0	3631 3***	3641 3***
	3 P + NC		3631 4***	3641 4***		3631 4***	3641 4***
	3 P + NP		3631 5***	3641 5***		3631 5***	3641 5***
32 ... 400	2 P	1 ... 6	3615 2***	3625 2***	11 ... 16	3831 2***	3841 2***
	3 P		3615 3***	3625 3***		3831 3***	3841 3***
	4 P		3615 6***	3625 6***		3831 6***	3841 6***
630 ... 1250	2 P	17 ... 18	3811 2***	3821 2***	17 ... 18	3811 2***	3821 2***
	3 P		3811 3***	3821 3***		3811 3***	3821 3***
	4 P		3811 6***	3821 6***		3811 6***	3821 6***

\* Stands for an alphanumeric character depending on the rating and configuration of the switch.

## Characteristics according to IEC 60269-2 from 20 to 100 A

Thermal current $I_{th}$ (40°C)	CD 20 A	CD 25 A	CD 32 A	CD 32 A	32 A	50 A	63 A	100 A
BS88/NFC/DIN fuse size	A1/-	-/10 x 38	-/10 x 38	A1/14 x 51	A1/-	-/14 x 51	A2-A3/00C	A4*/22 x 58
Frame size for direct operation	0	0	0	0	1	1	2	3
Switch body size for front and side operation	0	0	0	0	11	11	12	13
Rated insulation voltage $U_i$ (V)	800	800	800	800	800	800	800	800
Rated impulse withstand voltage $U_{imp}$ (kV)	8	8	8	8	8	8	8	8

### Rated operational currents $I_e$ (A)

Rated voltage	Utilisation category	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>
400 VAC	AC-22 A/AC-22 B	20/20	25/25	32/32	32/32	32/32	50/50	63/63	100/100
400 VAC	AC-23 A/AC-23 B	20/20	25/25	32/32	32/32	32/32	50/50	63/63	100/100
690 VAC	AC-22 A/AC-22 B	20/20	25/25	32/32	32/32	32/32	50/50	63/63	100/100
690 VAC	AC-23 A/AC-23 B	20/20	25/25	32/32	32/32	32/32	50/50	63/63	100/100
220 VDC	DC-20 A/DC-20 B			-/32		32/32	50/50	63/63	100/100
220 VDC	DC-21 A/DC-21 B		-/25 <sup>(2)</sup>			32/32	40/40	40/40	100/100
440 VDC	DC-20 A/DC-20 B					32 <sup>(3)</sup> /32 <sup>(3)</sup>	50 <sup>(3)</sup> /50 <sup>(3)</sup>	63 <sup>(3)</sup> /63 <sup>(3)</sup>	100 <sup>(3)</sup> /100 <sup>(3)</sup>
440 VDC	DC-21 A/DC-21 B					32 <sup>(3)</sup> /32 <sup>(3)</sup>	40 <sup>(3)</sup> /40 <sup>(3)</sup>	40 <sup>(3)</sup> /40 <sup>(3)</sup>	100 <sup>(3)</sup> /100 <sup>(3)</sup>

### Operational power in AC-23 (kW)

At 400 VAC without pre-break in AC <sup>(1)(4)</sup>	9/9	11/11	15/15	15/15	15/15	25/25	30/30	51/51
At 690 VAC without pre-break in AC <sup>(1)(4)</sup>	15/15	22/22	25/25	25/25	25/25	45/45	55/55	90/90

### Reactive power (kvar)

At 400 VAC <sup>(4)</sup>	8	11	15	15	15	23	28	45
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### Fuse protected short-circuit withstand BS88/DIN (kA rms prospective)

Prospective short-circuit (kA rms) <sup>(5)</sup>	80/-	-/100	-/100	80/100	80/100	-/100	80/100	80/100
Associated fuse rating (A) <sup>(5)</sup>	20/-	-/25	-/32	32/32	32/32	-/50	63/63	100/100

### Short-circuit capacity

Rated peak withstand current (kA peak) <sup>(5)</sup>	5.5	5.5	5.5	5.5	9	7.6	10.6	20
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### Fuse selection (maximum fuse size)

SOCOMECS BS88 - Standard max	6A10 0020	6012 0025	6012 0032	6A10 0032	6A10 0032		6A30 0063	6A40 0100
SOCOMECS BS88 - Motor max	6A1M 0032	6013 0025	6013 0032	6A1M 0063	6A1M 0032		6A3M 0080	6A4M 0125
SOCOMECS DIN - Distribution (gl - gG)						6022 0050	6600 0063	6032 0100
SOCOMECS DIN - Motor (aM)						6023 0050	6601 0063	6033 0100
BUSSMANN - Standard max	NITD 20			NITD 32	NITD 32		BAO 63	CEO 100
BUSSMANN - Motor max	NITD 20M32			NITD 32M63	NITD 32M63		BAO 63M80	CEO 100M125
LAWSON - Standard max	NIT 20			NIT 32	NIT 32		TIS 63	TCP 100
LAWSON - Motor max	NIT 20M32				NIT 20M32		TIS 63M80	CTFP 100M125
GE - Standard max	NIT 20			NET 32	NET 32		TIS 63	TCP 100
GE - Motor max	NIT 20M32			NET 32M63	NET 32M63		TIS 63M80	QCP 100M125

### Connection

Minimum Cu cable cross-section (mm <sup>2</sup> )	2.5	2.5	2.5	2.5	6	6	10	25
Maximum Cu cable cross-section (mm <sup>2</sup> )	16	16	16	16	25	25	25	95
Maximum busbar width (mm)								20
Min./ Max. tightening torque min (Nm)	2/-	2/-	2/3	2	2.5/3	2.5/3	2.5/3	8.3/13

### Mechanical characteristics

Durability (number of operating cycles)	20 000	20 000	20 000	20 000	10 000	10 000	10 000	10 000
Weight of 3 P switch (kg)	0.48	0.48	0.48	0.50	0.80	0.80	1	1.5
Weight of 4 P switch (kg)	0.50	0.50	0.50	0.52	1	1	1.3	2
Weight of 1 P extra (kg)					0.2	0.2	0.3	0.5
Frame pitch (mm)					32	27	32	36

(1) Category with index A = frequent operation - Category with index B = infrequent operation.

(2) With terminal shrouds or terminal screen.

(3) 4-pole device with 2 pole in series by polarity.

(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) For a rated operational voltage  $U_e = 400$  VAC.

\* For fuse size A4: max diameter 31 mm.

\*\* Please ensure that fuse let through current does not exceed short-circuit capacity of the switch (kA peak).

# FUSERBLOC

## Fuse combination switches

for industrial fuses up to 1250 A

### Characteristics according to IEC 60269-2 from 125 to 200 A

Thermal current $I_{th}$ (40°C)	125 A	125 A	160 A	CD 160 A	160 A	160 A	CD 200 A	200 A
BS88/NFC/DIN fuse size	-/22 x 58	-/00	-/00	A3-A4*/-	A4/0	B1-B2/-	A3-A4*/-	B1-B2/-
Frame size for direct operation	3	3	3		4	4		5
Switch body size for front and side operation (A)	13	13	13	13	14	14	13	15
Rated insulation voltage $U_i$ (V)	800	800	800	800	800	800	800	800
Rated impulse withstand voltage $U_{imp}$ (kV)	8	8	8	8	8	8	8	8

### Rated operational currents $I_e$ (A)

Rated voltage	Utilisation category	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>
400 VAC	AC-22 A/AC-22 B	125/125	125/125	160/160	160/160	160/160	160/160	200/200	200/200
400 VAC	AC-23 A/AC-23 B	125/125	125/125	160/160	160/160	160/160	160/160	200/200	200/200
690 VAC	AC-22 A/AC-22 B	125 <sup>(2)</sup> /125 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	160 <sup>(2)</sup> /160 <sup>(2)</sup>	160 <sup>(2)</sup> /160 <sup>(2)</sup>	160 <sup>(2)</sup> /160 <sup>(2)</sup>	160 <sup>(2)</sup> /160 <sup>(2)</sup>	160 <sup>(2)</sup> /160 <sup>(2)</sup>	200 <sup>(2)</sup> /200 <sup>(2)</sup>
690 VAC	AC-23 A/AC-23 B	100 <sup>(2)</sup> /100 <sup>(2)</sup>	100 <sup>(2)</sup> /100 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	125 <sup>(2)</sup> /125 <sup>(2)</sup>	200 <sup>(2)</sup> /160 <sup>(2)</sup>
220 VDC	DC-20 A/DC-20 B	125/125	125/125	160/160	160/160	160/160	160/160	160/160	200/200
220 VDC	DC-21 A/DC-21 B	100/100	100/100	125/125	125/125	125/125	125/125	125/125	200/200
440 VDC	DC-22 A/DC-22 B	125 <sup>(3)</sup> /125 <sup>(3)</sup>	125 <sup>(3)</sup> /125 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	200 <sup>(3)</sup> /200 <sup>(3)</sup>
440 VDC	DC-23 A/DC-23 B	100 <sup>(3)</sup> /100 <sup>(3)</sup>	100 <sup>(3)</sup> /100 <sup>(3)</sup>	125 <sup>(3)</sup> /125 <sup>(3)</sup>	160 <sup>(3)</sup> /160 <sup>(3)</sup>	125 <sup>(3)</sup> /125 <sup>(3)</sup>	125 <sup>(3)</sup> /125 <sup>(3)</sup>	125 <sup>(3)</sup> /125 <sup>(3)</sup>	200 <sup>(3)</sup> /200 <sup>(3)</sup>

### Operational power in AC-23 (kW)

At 400 VAC without pre-break in AC <sup>(1)(4)</sup>	63/63	63/63	80/80	80/80	80/80	80/80	80/80	80/80	100/100
At 690 VAC without pre-break in AC <sup>(1)(4)</sup>	90/90	90/90	110/110	110/110	110/110	110/110	110/110	110/110	150/185

### Reactive power (kvar)

At 400 VAC <sup>(4)</sup>	55	55	75	70	75	75	75	90	90
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### Fuse protected short-circuit withstand (kA rms prospective)

Prospective short-circuit (kA rms) <sup>(5)</sup>	-/100	-/100	-/100 (50)	50/-	80/100	80/100	50/-	80/-
Associated fuse rating (A) <sup>(5)</sup>	-/125	-/125	-/125 (160)	160/-	160/160	160/160	200/-	200/-

### Short-circuit capacity

Rated peak withstand current (kA peak) <sup>(5)</sup>	20	20	20	20	22.7	22.7	20	32.5
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### Fuse selection (maximum fuse size)

SOCOMECS BS88 - Standard max				6A40 0160	6A40 0160	6B20 0160	6A40 0200	6B20 0200
SOCOMECS BS88 - Motor max				6A4M 0160	6A4M 0160	6B1M 0200	6A4M 0315	6B2M 0315
SOCOMECS DIN - Distribution (gl - gG)	6032 0125	6692 0125	6692 0160		6702 0160			
SOCOMECS DIN - Motor (aM)	6033 0125	6693 0125	6693 0160		6703 0160			
BUSSMANN - Standard max				DEO 160	DEO 160	DD 160	DEO 200	DD 200
BUSSMANN - Motor max				CEO 100M160	DEO 100M200	CD 100M200	DEO 200M315	DD 200M315
LAWSON - Standard max				CTFP 160	TFP 160	TF 160	TF 200	TF 200
LAWSON - Motor max				CTCP 100M160	TCP 100M200	TCP 100M200	TC 200M315	TC 200M315
GE - Standard max				TCP 100	TFP 160	TF 160	TF 200	TF 200
GE - Motor max				OCP 100M160	TCP 100M201	TC 100M200	TF 200M315	TF 200M315

### Connection

Minimum Cu cable cross-section (mm <sup>2</sup> )	35	35	35	35	50	50	35	95
Maximum Cu cable cross-section (mm <sup>2</sup> )	95	95	95	95	95	95	95	240
Maximum busbar width (mm)	20	20	20	20	20	20	20	32
Tightening torque min (Nm)	8.3/13	8.3/13	8.3/13	8.3/13	8.3/13	8.3/13	8.3/13	20/26

### Mechanical characteristics

Durability (number of operating cycles)	10 000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Weight of 3 P switch (kg)	1.5	1.5	1.8	1.8	1.8	1.8	1.8	3.2
Weight of 4 P switch (kg)	2	2	2.3	2.3	2.3	2.3	2.3	4.5
Weight of 1 P extra (kg)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.3
Frame pitch (mm)	36	36	36	36	50	50	36	60

(1) Category with index A = frequent operation - Category with index B = infrequent operation.

(2) With terminal shrouds or phase barrier.

(3) 4-pole device with 2 poles in series per polarity.

(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) For a rated operational voltage  $U_e = 400$  VAC.

\* For fuse size A4: max diameter 31 mm.

## Characteristics according to IEC 60269-2 from 250 to 1250 A

Thermal current $I_{th}$ (40°C)	250 A	315 A	400 A	630 A	800 A	800 A	1250 A
BS88/NFC/DIN fuse size	B1-B2-B3/1	B1-B2-B3/-	B1-B2-B3-B4/2	C1-C2/3	C1-C2-C3/3	-/4	D1/4
Frame size for direct operation	5	6	6	17	17	18	18
Switch body size for front and side operation (A)	15	16	16	17	17	18	18
Rated insulation voltage $U_i$ (V)	800	1000 (800*)	1000 (800*)	1000	1000	1000	1000
Rated impulse withstand voltage $U_{imp}$ (kV)	8	12 (8*)	12 (8*)	12	12	12	12

### Rated operational currents $I_e$ (A)

Rated voltage	Utilisation category	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>	A/B <sup>(1)</sup>
400 VAC	AC-22 A/AC-22 B	250/250	315/315	400/400	630/630	800/800	800/800	1250/1250
400 VAC	AC-23 A/AC-23 B	250/250	315/315	400/400	630/630	800/800	800/800	1000/1250
690 VAC	AC-22 A/AC-22 B	250 <sup>(2)</sup> /250 <sup>(2)</sup>	315 <sup>(2)</sup> /315 <sup>(2)</sup>	400/400	500/630	800/800	800/800	800/1250
690 VAC	AC-23 A/AC-23 B	250 <sup>(2)</sup> /250 <sup>(2)</sup>	250 <sup>(2)</sup> /315 <sup>(2)</sup>	315/400	315/400	630/630	800/800	800/630
220 VDC	DC-20 A/DC-20 B	250/250	250/250	315/315	315/630	800/800	800/800	1250/1250
220 VDC	DC-21 A/DC-21 B	200/200	200/200	200/315	400/630	800/800	800/800	1250/1250
440 VDC	DC-22 A/DC-22 B	250 <sup>(3)</sup> /250 <sup>(3)</sup>	250 <sup>(3)</sup> /250 <sup>(3)</sup>	315 <sup>(3)</sup> /315 <sup>(3)</sup>	315/630 <sup>(3)</sup>	800 <sup>(3)</sup> /800 <sup>(3)</sup>	800/800	1250 <sup>(3)</sup> /1250 <sup>(3)</sup>
440 VDC	DC-23 A/DC-23 B	200 <sup>(3)</sup> /200 <sup>(3)</sup>	200 <sup>(3)</sup> /200 <sup>(3)</sup>	250 <sup>(3)</sup> /315 <sup>(3)</sup>	400 <sup>(3)</sup> /630 <sup>(3)</sup>	800 <sup>(3)</sup> /800 <sup>(3)</sup>	800/800 <sup>(3)</sup>	1000 <sup>(3)</sup> /1000 <sup>(3)</sup>

### Operational power in AC-23 (kW)

At 400 VAC without pre-break in AC <sup>(1)(4)</sup>	132/132	160/160	220/220	355/355	450/450	450/450	560/560
At 690 VAC without pre-break in AC <sup>(1)(4)</sup>	220/220	220/295	220/295	295/400	400/400	400/400	400/475

### Reactive power (kvar)

At 400 VAC <sup>(4)</sup>	115	145	185	290	365	355	460
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### Fuse protected short-circuit withstand (kA rms prospective)

Prospective short-circuit (kA rms) <sup>(5)</sup>	80/100	80/-	80/100	80/100	80/100	-/100	-/100
Associated fuse rating (A) <sup>(5)</sup>	250/250	315/-	400/400	630/630	800/800	-/800	-/1250

### Short-circuit capacity

Rated peak withstand current (kA peak) <sup>(5)</sup>	32.5	40	40	70	80	80	90
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### Fuse selection (maximum fuse size)

SOCOMECS BS88	6B20 0250	6B30 0315	6B40 0400	6C20 0630	6C30 0800		
SOCOMECS BS88	6B2M 3015	6B3M 0400	6B4M 0500				
SOCOMECS DIN	6712 0250		6722 0400	6732 0400		6746 0800	6746 1200
SOCOMECS DIN	6713 0250		6723 0400	6733 0400		6747 0800	6747 1200
BUSSMANN	ED 250	ED 315	ED 400	FF 630	GF 800		
BUSSMANN	DD 200M315	ED 315M400	ED 400M500				
LAWSON	TKF 250	TKF 315	TMF 400	TTM 630	TLM 800		
LAWSON	TF 200M315	TKF 315M400	TMF 400M500				
GE	TKF 250	TKF 315	TMF 400	TTM 630	TLM 800		
GE	TF 200M315	TKF 315M355	TMF 400M450				

### Connection

Minimum Cu cable cross-section (mm <sup>2</sup> )	95	185	185	2 x 150	2 x 185		
Maximum Cu cable cross-section (mm <sup>2</sup> )	240	240	240	2 x 300	2 x 300	4 x 185	4 x 185
Maximum busbar width (mm)	32	45	45	63	63	80	80
Tightening torque min (Nm)	20/26	20/26	20/26	40/45	40/45	40/45	40/45

### Mechanical characteristics

Durability (number of operating cycles)	10 000	10 000	10 000	8 000	8 000	5 000	5 000
Weight of 3 P switch (kg)	3.2	4.8	4.8	16	17	25	25
Weight of 4 P switch (kg)	4.5	6.1	6.1	20	21.5	30	30
Weight of 1 P extra (kg)	1.3	1.3	1.3			3	3
Frame pitch (mm)	60	66	66	94	94	120	120

(1) Category with index A = frequent operation - Category with index B = infrequent operation.

(2) With terminal shrouds or terminal screen.

(3) 4-pole device with 2 pole in series by polarity.

(4) The power value is given for information only, the current values vary from one manufacturer to another.

(5) For a rated operational voltage  $U_n = 400$  VAC.

\* Direct operation switch.

\*\* Please ensure that fuse let through current does not exceed short-circuit capacity of the switch (kA peak).

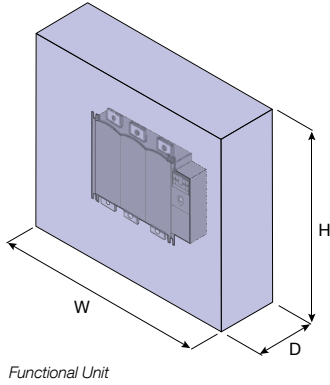
# FUSERBLOC

Fuse combination switches

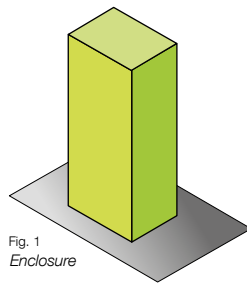
for industrial fuses up to 1250 A

## Product integration data in compliance with IEC/EN 61439-1

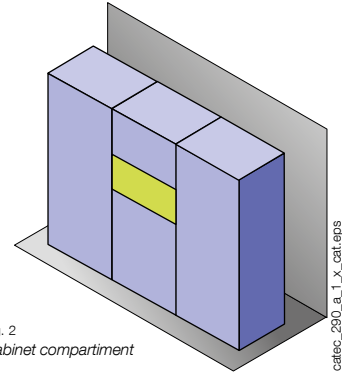
Below listed data is applicable to:



fuser\_01\_la\_1\_gb\_cat.ai



cattec\_269\_a\_1\_x\_cat.eps



cattec\_269\_a\_1\_x\_cat.eps

Dimensions of the Functional Unit			Mounting	
H (mm)	W (mm)	D (mm)	Enclosure	Orientation
150	200	150	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V / H <sup>(1)</sup>
200	300	350	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V / H <sup>(1)</sup>
400	400	200	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V / H <sup>(1)</sup>

	Max operational current, I <sub>e</sub> (A)							
	CD 20 A	CD 25 A	CD 32 A	50 A	63 A	100 A	125 A	(CD) 160 A
NFC/DIN fuse	-	10 x 38	10 x 38/14 x 51	14 x 51	00C	22 x 58	22 x 58/00	00/0
BS88 fuse	A1	-	A1	-	A2/A3	A4 <sup>(2)</sup>		A3/A4/B1/B2
	20 / 20	25 / 25	32 / 32	45 / 45	50 / 50			
	20	25	32	50	63	100	115	145
	20 / 20	25 / 25	32 / 32	50 / 50	57 / 57	97 / 97	108 / 103	136 / 112
						100	125	160
						100 / 100	120 / 112	150 / 145
	Min cross-section (mm <sup>2</sup> )							
Insulated flat copper braids P/N 4516 ****	-	-	-	-	-	20 x 3	20 x 3	20 x 3
Cu cable	4	4	6	10	16	35	50	70
Cu busbar	-	-	-	-	-	20 x 3	20 x 3	20 x 3

\* Stands for an alphanumeric character depending on the rating and configuration of the switch.

Dimensions of the Functional Unit			Mounting	
H (mm)	W (mm)	D (mm)	Enclosure	Orientation
350	500	300	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V/H <sup>(1)</sup>
400	450	300	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V / H <sup>(1)</sup>
300	600	350	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V/H <sup>(1)</sup>
450	500	300	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V/H <sup>(1)</sup>
500	600	350	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V/H <sup>(1)</sup>
800	650	350	Fig. 1	V <sup>(1)</sup>
			Fig. 2	V/H <sup>(1)</sup>
1000	800	400	Fig. 1	V <sup>(1)</sup>

	Max operational current, I <sub>e</sub> (A)						
	(CD) 200 A	250 A	315 A	400 A	630 A	800 A	1250 A
NFC/DIN fuse	-	1	-	2	3	3	4
BS88 fuse	A3/A4/B1/B2	B1/B2/B3	B1/B2/B3	B1/B2/B3/B4	C1/C2	C1/C2/C3	D1
	200	200	315	320			
	-/170	-/170	300/285	315/300			
	200	245	315	320			
	185 / 175	215 / 200	315 / 310	320 / 305			
	200	250					
	190 / 180	225 / 205					
		250		330	560		
		240 / 235		-	500/440		
				400	590	590	890
				340 /-	560/504	560/504	850/765
				400	612	680	1000
				-	-	650/590	950/850
					630	800	1125
	Min cross-section (mm <sup>2</sup> )						
Cu cable	95	120	185	240	2 x 185	2 x 240	4 x 185
Cu busbar	20 x 4	> 25 x 4	> 20 x 6	> 20 x 6	> 32 x 10	> 50 x 10	> 80 x 10

(1) V: vertical mounting; H: Horizontal mounting

(2) Fuse size A4: max diameter 31 mm.

## Product integration data in compliance with IEC/EN 61439-1 (continued)

Heat dissipation									
Rating (A)	CD 20	CD 25	CD 32	50	63	100	125	(CD) 160	
Switch heat dissipation W/pole	0.54	0.7	1.3	2.5	4.4	6	7	10	
NFC/DIN fuse W/pole	-	2.3	3.3	4.6	6	9	11	12	
BS88 fuse W/pole	1.8	-	3.3	-	5.7	9	-	13	

Maximum ambient temperature	
External	35°C
Internal	60°C

Heat dissipation							
Rating (A)	(CD) 200	250	315	400	630	800	1250
Switch heat dissipation W/pole	17	16	29,3	24	57	66	154
NFC/DIN fuse W/pole	-	23	-	33	61	65	110
BS88 fuse W/pole	16	19	26	32	55	65	100

## Fuse derating due to the ambient temperature (ta) surrounding the device

$$I_{th} u \leq Kt \times I_n$$

$I_{th} u$ : operation thermal current: maximum permanent current accepted by the device for 8 hours in specific conditions

$I_n$ : fuse rated current

$Kt$ : coefficient given in table below

If the fuse is installed in a ventilated enclosure  $Kt$  and  $Kv$  values must be multiplied.

- Air speed  $V < 5$  m/s  $Kv = 1 + 0.05 V$
- Air speed  $V \geq 5$  m/s  $Kv = 1.25$

Example: A gG fuse is mounted in a base within a ventilated enclosure

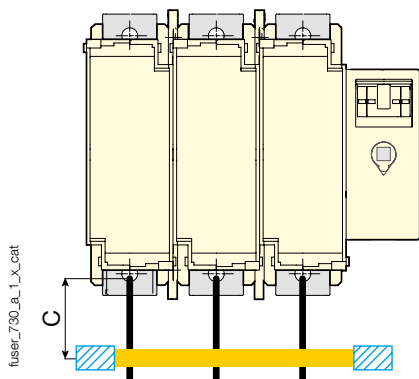
- Temperature in the enclosure: 60°C
- Air speed: 2 m/s

$$Kv = 1 + 0.05 \times 2 = 1.1$$

$$Kt = 1.1 \times 0.86 = 0.95$$

Temperature (ta)	Kt			
	gG fuse		aM fuse	
	Fuse base	Equipment and combination	Fuse base	Equipment and combination
40°C	1	1	1	1
45°C	1	0.95	1	1
50°C	0.93	0.90	0.95	0.95
55°C	0.90	0.86	0.93	0.90
60°C	0.86	0.83	0.90	0.86
65°C	0.83	0.79	0.86	0.83
70°C	0.80	0.76	0.84	0.80

## Wiring requirements



Recommended tightening torque	Maximum tightening torque
M6: 4.5 N.m	M6: 5.4 N.m
M8: 8.3 N.m	M8: 13 N.m
M10: 20 N.m	M10: 26 N.m
M12: 40 N.m	M12: 45 N.m

	C (mm)
Min power connections length	400
Min distance to first bus bar support	400