

DSX transfer switching equipment

Rail mounting

Reference(s) :

From 4 241 00 to 4 241 09; 4 241 46; 4 240 47



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1. USE

DSX platform has been developed to give a new solution for switch disconnection, providing a complete platform in standard market segments.

Suitable for long-life projects due to its large electrical duration, DSX range offers optimum performances in Open and Close operation and in operation quality, also giving a complete range of accessories, at a competitive cost.

2. RANGE

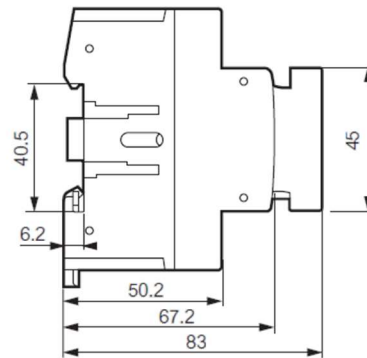
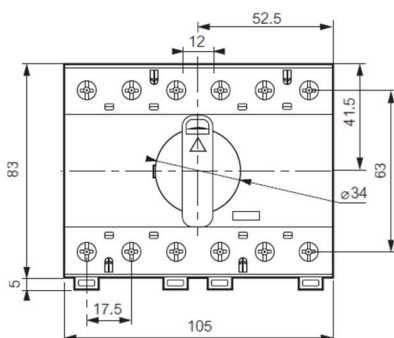
DSX - TSE - Rail mounting			
Frame	I_n [A]	3P	4P
1	32	424100	424106
	40	424101	424107
	63	424102	424108
2	100	424103	424109
	125	424104	424146
	160	424105	424147

3. DIMENSIONS AND WEIGHTS

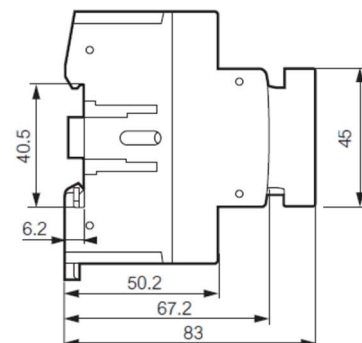
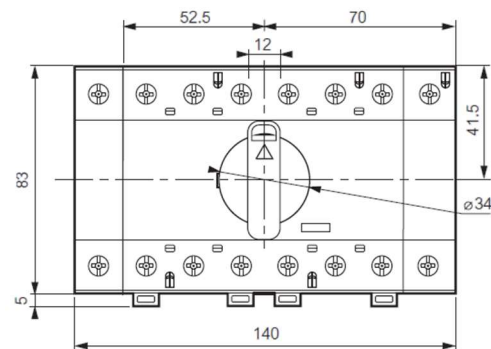
3.1 Dimensions

Frame 1

Frontal and lateral view (Frame 1 - 3 poles)



Frontal and lateral view (Frame 1 - 4 poles)

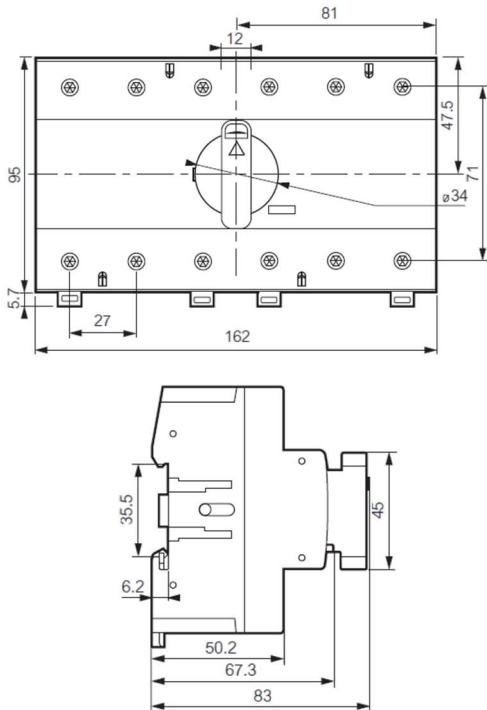


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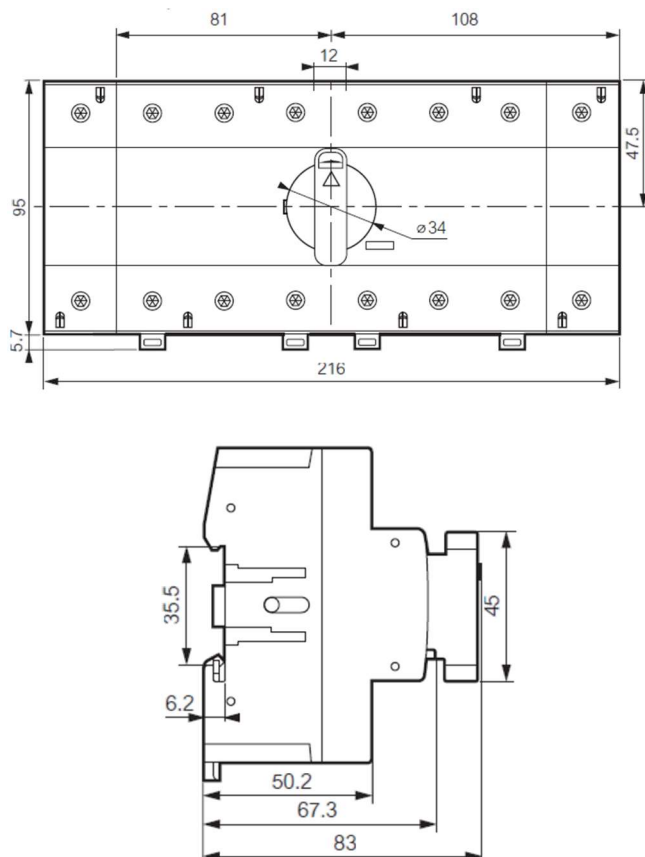
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Frame 2

Frontal and lateral view (Frame 2 - 3 poles)



Frontal and lateral view (Frame 2 - 4 poles)



3.2 Weights

Weights [kg]			
Frame	I _n [A]	3 poles	4 poles
1	63 A	0.59	0.74
2	160 A	1.2	1.36

4. OVERVIEW

4.1 Supply material

All DIN transfer switching equipment in frame 1 and 2, have no need to have supplied material.

5. ELECTRICAL CONNECTIONS

5.1 Mounting possibilities

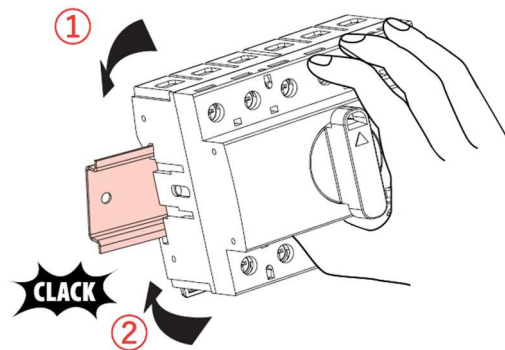
On DIN rail:

- Vertical,
- Horizontal,
- Supply inverter type

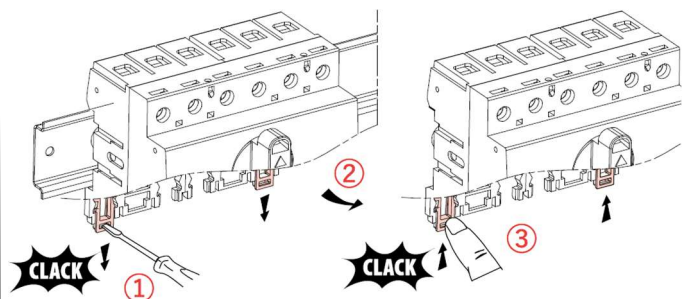
5.2 Mounting procedures

(see instruction sheet for detailed mounting procedures)

Mounting



Dismounting



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6. ELECTRICAL AND MECHANICAL CHARACTERISTICS

6.1 Technical values

DIN switch disconnecter - Size 1&2	Frame 1 - 63A	Frame 2 - 160A
Rated current I_n (A)	32A, 40A, 63A	100A, 125A, 160A
Number of poles	3P-4P	3P-4P
Rated insulation voltage U_i (V)	690	690
Rated impulse withstand voltage U_{imp} (kV)	8	8
Dielectric strength 50 Hz 1 min (kV)	6	6
Rated operational voltage (AC) U_e (V)	690	500
Rated operational voltage (DC) U_e (V)	250	250
Short circuit making capacity I_{cm} (kApk)	2.1	3.5
Maximal withstand peak current (while protection breaks short circuit) (kApk)	3	3.5
Power pole dissipation (at rated operational current) (W/pole)	0.8 @ 32A 1.1 @ 40A 1.73 @ 63A	3.2 @ 100A 4 @ 125A 5.1 @ 160A
Short time withstand current (1 s) I_{cw} (kA)	1.5	2.5
Electrical + Mechanical endurance (No. of operations)	10000	6000
Rated Ambient temperature T_a (°C)	40/50	40/50
Temperature Withstand range (°C)	-25/+70	-25/+70
Terminal type	Cage	Cage
Maximal copper cable mm²	35/50	70/95

6.2 Degree of protection device (IP), with terminal shields

- IP20 - Standalone
- IP40 - With Terminal Shield
- IP40 - With Terminal Shield inside panel
- IP55 - With Terminal Shield & VD Handle inside panel

6.3 Category of use

	Category of use DIN switch disconnecter - Size 1&2	Frame 1 - 63A			Frame 2 - 160A			
		32	40	63	100	125	160	
IEC 60947-3	AC 20 A/B AC 21 A/B AC 22 A/B AC 23 A/B	415 VA AC	32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	63	100	125	160
	AC 20 A/B AC 21 A/B AC 22 A/B AC 23 A/B	500 VA AC	32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	40	100	125	125
			25	25	25	63	63	63
	AC 20 A/B AC 21 A/B AC 22 A/B AC 23 A/B	690 VA AC	32	40	63	-	-	-
			32	40	63	-	-	-
			32	40	40	-	-	-
			25	25	25	-	-	-
DC 20 A/B DC 21 A/B DC 22 A/B DC 23 A/B	250 V DC	32	40	63	100	125	160	
		32	40	63	100	125	160	
		32	40	40	100	125	125	
		25	25	25	63	63	63	
IEC 60947-6-1	AC 30 A/B AC 31 A/B AC 32 A/B AC 33 A/B	415 VA AC	32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	63	100	125	160
	AC 30 A/B AC 31 A/B AC 32 A/B AC 33 A/B	500 VA AC	32	40	63	100	125	160
			32	40	63	100	125	160
			32	40	40	100	125	125
			25	25	25	63	63	63
	AC 30 A/B AC 31 A/B AC 32 A/B AC 33 A/B	690 VA AC	32	40	63	-	-	-
			32	40	63	-	-	-
			32	40	40	-	-	-
			25	25	25	-	-	-
DC 30 A/B DC 31 A/B DC 32 A/B DC 33 A/B	250 V DC	32	40	63	100	125	160	
		32	40	63	100	125	160	
		32	40	40	100	125	125	
		25	25	25	63	63	63	

6.4 Deratings

according to IEC/EN 60947-1

6.4.1 Temperature

Rated current and his adjustment must be considered relating to a rise or fall of ambient temperature and to a different version or installation conditions.

6.4.2 Specific condition use

Climatic conditions

according to IEC/EN 60947-1 Annex Q, Cat. F subject to temperature, humidity, vibration, shock, and salt mist.

Pollution degree

for DSX transfer switched, degree 3, according to IEC/EN 60947-6-1.

6.4.3 Altitude

Altitude derating for DSX transfer switching equipment.

Altitude [m]	2000	3000	4000	5000
Rated Voltage [V]	690	590	520	460

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7. CONFORMITY

DSX range of product concerning transfer switched exceed compliance with the IEC/EN standard 60947-6-1 respectively.

Certification available by IECEE CB-scheme.

DSX respect the European Directives REACh, RoHS, RAEE.

For specific information, please contact Legrand support.

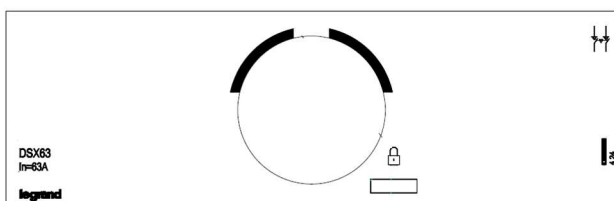
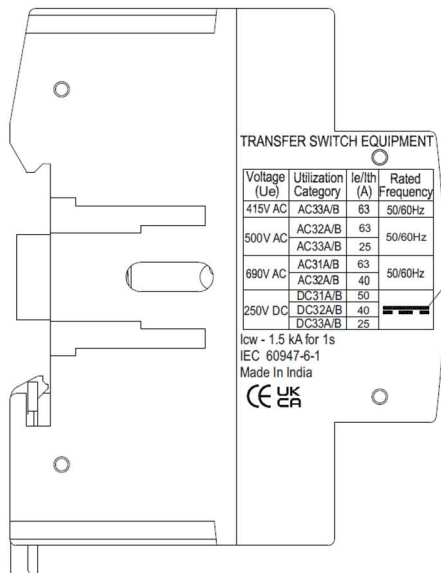
7.1 Marking

Product are provided with labelling in full conformity to the referred standard and directives requirements by laser or sticker labels (for illustrative purposes only) as:

Below markings images refer to Ref. 4 241 02 as an example, data marked on Frame 1 and Frame 2 may differ according to results coming from validation tests.

Laser marking and pad printing

- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Made in
- Standard conformity



Laser marking and pad printing

- Manufacturer responsible
- Denomination and type product
- Directive requirements
- QR code identification product
- Manufacturing Country
- EAN code and traceability code



Packaging sticker label

- Reference number
- Manufacturer responsible
- Denomination and type product
- Mark/Licence (if any)
- Directive requirements
- Bar code identification product
- Manufacturing Country



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8. EQUIPMENTS AND ACCESSORIES

8.1 Auxiliary contacts

- Auxiliary contact Simultaneous (1 NO + 1 NC) *ref. 4 242 08*
Also usable with SD's (Switch Disconnecter)

Used to show the state of the contacts.

Electrical characteristics: 5 A - 230 VA

Can be mounted on both sides of the switches: maximum 4 auxiliaries per switch (2 on each side)

8.2 Rotary handles (for front operation)

Direct on DSX switch disconnecter

- Standard (black) *ref. 4 242 15*
- For emergency use (red / yellow) *ref. 4 242 16*

Vari-depth handle IP54

Also usable with SD's (Switch Disconnecter)

Comprising: connection rod, bracket, self-adhesive drilling template, mounting accessories and door lock mechanism. Padlockable in open position (up to 3 Ø 8 mm padlocks)

- Standard (black) *ref. 4 242 09*
- For emergency use (red / yellow) *ref. 4 242 10*

8.3 Sealable terminal shields (IP30)

Also usable with SD's (Switch Disconnecter)

- Frame 1 & 1-pole switch *ref. 4 242 03*
- Frame 1 & 3-pole switch *ref. 4 242 02*
- Frame 2 & 1-pole switch *ref. 4 242 14*
- Frame 2 & 3-pole switch *ref. 4 242 13*

8.4 Bridging links for transfer switching equipment

- Frame 1 & 3-pole switch (set of 3) *ref. 4 242 00*
- Frame 1 & 4-pole switch (set of 4) *ref. 4 242 01*
- Frame 2 & 3-pole switch (set of 3) *ref. 4 242 11*
- Frame 2 & 4-pole switch (set of 4) *ref. 4 242 12*

Data indicated in this document refers exclusively to test conditions according to product standards, unless otherwise indicated in the documentation.

For the different conditions of use of the product, inside electrical equipment or in any case inserted in the installation context, refer to the regulatory requirements of the equipment, local regulations, and design specifications of the system.