

# DSX

SAFETY, STRENGTH AND  
EASE OF INSTALLATION



.....  
ISOLATING SWITCHES &  
TRANSFER SWITCHING EQUIPMENT  
UP TO 160 A  
.....

THE GLOBAL SPECIALIST  
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES



NEW RANGE

# DSX

A new range  
that meets the  
specific needs of  
*your installations*

Legrand's new isolating switches and transfer switching equipment are used for incoming control in various fields of application: low voltage distribution boards, transformer substations, power plants, wind turbines, data centers, machine control, UPS, etc. The DSX range integrates seamlessly into XL<sup>3</sup>-S or XL<sup>3</sup> enclosures to create different configurations depending on the type of installation.



## DSX RANGE

CONFORMING TO STANDARDS:

**IEC 60947-3: 2020**

FOR ISOLATING SWITCHES

**IEC 60947-6-1: 2020**

FOR TRANSFER SWITCHING EQUIPMENT

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Modular range:

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**DSX**, AN ESSENTIAL RANGE OF DEVICES WHICH CAN BE USED TO MAKE SAFE AND ISOLATE NETWORKS AND ELECTRICAL EQUIPMENT TO ENSURE THE SAFETY OF PEOPLE AND PROPERTY AND COMPLIANCE WITH CURRENT STANDARDS



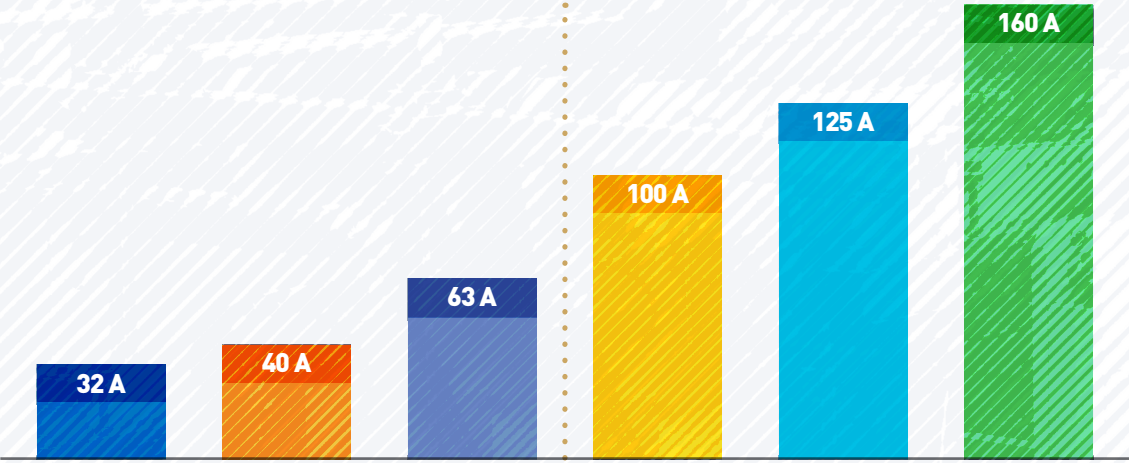
**DIN RAIL-MOUNTING DSX RANGE**  
from 32 A to 160 A

# Rail or plate-mounting, simpler selection

A suitable solution for installations up to 160 A

The new DSX range consists of two types of device: isolating switches and transfer switching equipment, DIN rail-mounting ( $I_n \leq 160$  A) available in 3 or 4-pole versions. Depending on the device type, they break, close or switch the load and safely isolate any low-voltage circuit, especially machine control circuits.

ON A DIN RAIL



ISOLATING SWITCHES



TRANSFER SWITCHING EQUIPMENT



OF USE CATEGORY	VOLTAGE
AC 23 A/B	415 V~
AC 21 A/B	690 V~
DC 21 A/B	250 V=

# Easier installation

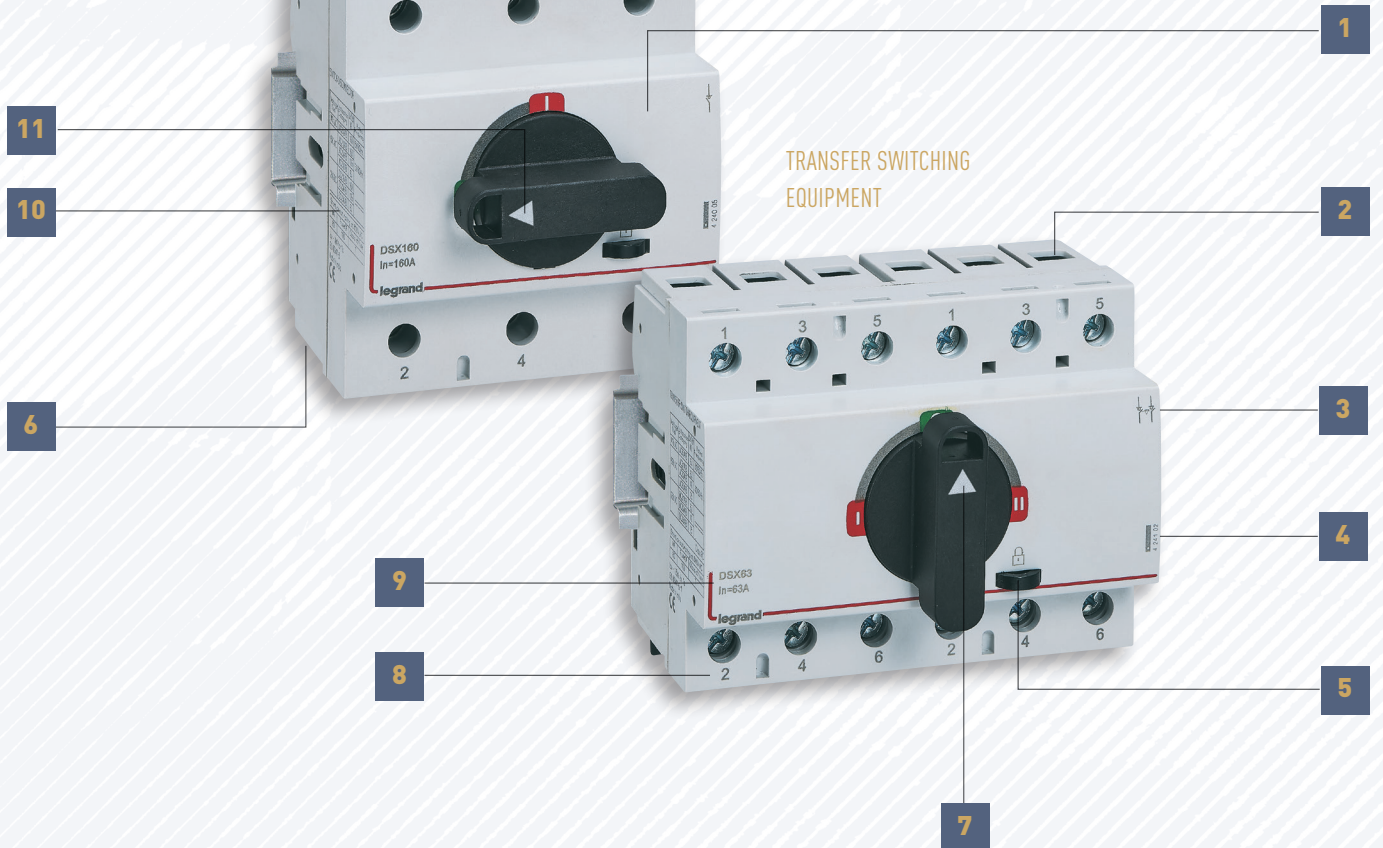
Optimise space  
and wiring  
operations

Up to 160 A, DSX isolating switches and transfer switching equipment can be mounted on a DIN rail. Their compact dimensions optimise the space inside distribution boards. They have been specially designed to make wiring and use easier.

ISOLATING SWITCHES



TRANSFER SWITCHING EQUIPMENT

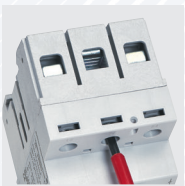


### 1 INTERNAL MECHANISM

With double-breaking poles by self-cleaning snap-action make/break contacts.

### 2 CAGE TERMINALS

for Al or Cu cables on isolating switches and transfer switching equipment.



### 3 MARKED WITH ELECTRICAL SYMBOL

For identifying the product function, even without a wiring diagram

### 4 MARKED WITH PRODUCT CATALOGUE NUMBER

For ease of identification.

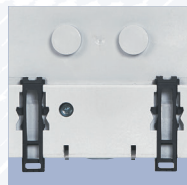
### 5 PADLOCKING DEVICE

In "open" position for maximum safety during maintenance operations. For 6 mm diameter padlocks



### 6 FIXING CLAWS

On DIN rail (at the back of the device).



### 7 FRONT HANDLE DIRECTLY ON THE DEVICE

Marked with arrow and cut-out for easy identification of the contact position.

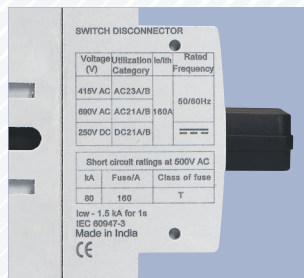
### 8 CONTACT IDENTIFICATION

Makes it easy to find contacts corresponding to the wiring diagram.

### 9 MARKED WITH NOMINAL CURRENT

### 10 TECHNICAL MARKING

Set out on the side of devices (voltage, frequency, category of use, etc).



### 11 POSITION MARKING

Corresponding to the contact position

#### ISOLATING SWITCHES

Green (0)



Red (I)

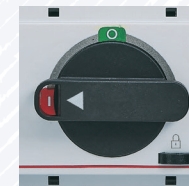


#### MANUAL SUPPLY INVERTERS

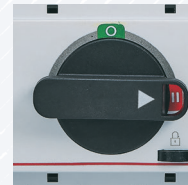
Green (0)



Red (II)



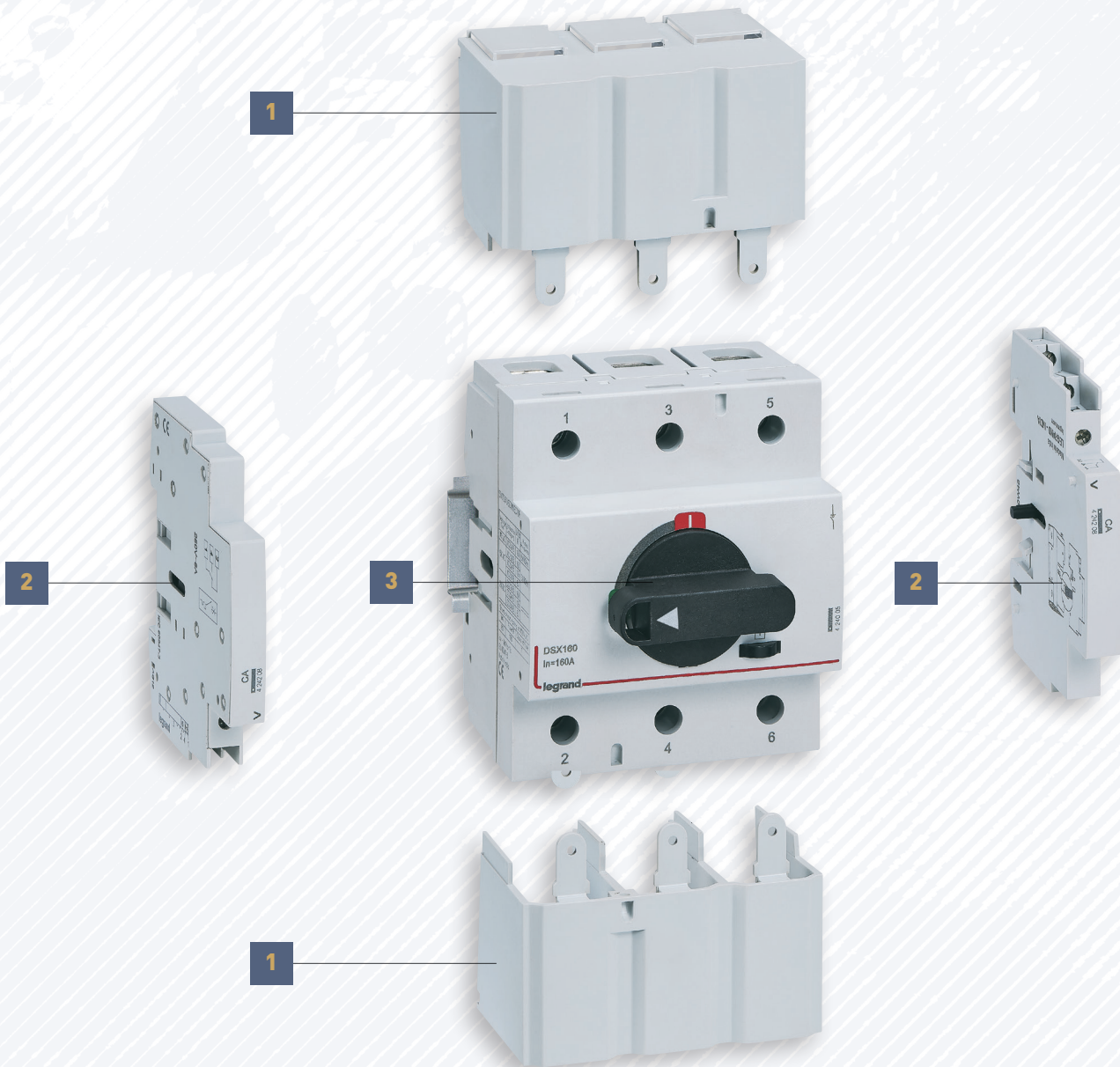
Red (III)



# Simpler selection and installation

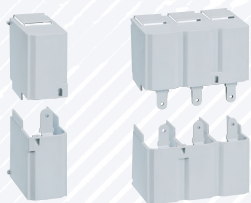
Accessories to improve speed and efficiency

Various accessories allow you to customise the installation to suit your needs: handle for mounting on door, auxiliary contacts, accessories for wiring and additional power poles.



### 1 IP30 SEALABLE TERMINAL SHIELD

Available in 1P and 3P version. Compatible with all products in the modular DSX range (isolating switches and transfer switching equipment).



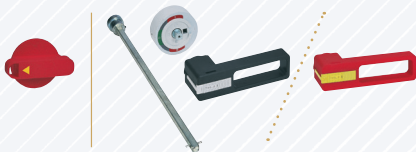
### 2 AUXILIARY SIGNALLING CONTACT (NO+NC)

Indicates the status of the contacts on the device to which it is attached. Simply clips onto the left or right of the device. Compatible with all products in the modular DSX range. A single device can take up to 4 auxiliary contacts (2 on each side).



### 3 FRONT HANDLE, DIRECTLY ON THE DEVICE.

Can be replaced with a red/yellow "emergency stop" type handle or an IP55 external handle for mounting on door (standard or "emergency stop" version).



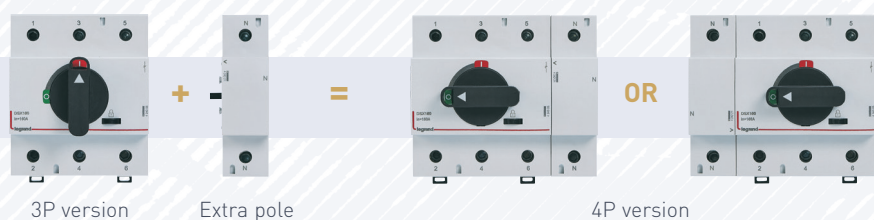
### SUPPLY INVERTERS

Manual supply inverters can also be equipped with bridging kits in 3P or 4P version on upstream or downstream terminals.



### EXTRA POWER POLE

To obtain a 4P isolating switch, simply equip a 3P version with an extra pole. The 4th pole can be installed on the left or right-hand side of the isolating switch for perfect adaptation to usual wiring methods.



Transfer switching equipment is available directly in 3P or 4P version.





# DSX switch-disconnectors and transfer switching equipment

└ rail mounting

N



Switch-disconnectors and transfer switching equipment equipped with a rotary direct handle. Front operated  
Conform to IEC 60947-3 and IEC 60947-6-1

Ref.	<b>Switch-disconnectors</b>	
	Safety switches for on-load circuit breaking by isolation of the contacts Internal mechanism is independent from the velocity of handle rotation Double break type load switching with self-cleaning contacts by rapid make and break movements Category of use: AC23 A/B (415 V~), Padlockable handle in open position (Ø 6 mm padlock) Cage terminals Accept copper and aluminium cables For 3P+N version, add 1 additional pole (Ref. 424204/05/06/19/20/21) Can be equipped with up to 4 auxiliary contacts (Ref. 424208), 2 contacts on each side	
	<b>Frame 1 - 63 A</b>	
	Width: 1 module per pole	
3P	In	Number of modules
424000	32 A	3
424001	40 A	3
424002	63 A	3
	<b>Frame 2 - 160 A</b>	
	Width: 1.5 module per pole	
424003	100 A	4.5
424004	125 A	4.5
424005	160 A	4.5

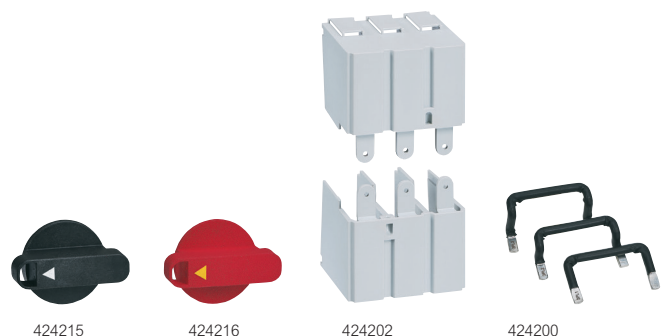
<b>Additional poles (neutral) for switch-disconnectors</b>		
	To be clipped onto left or right side of a 3-pole switch-disconnectors Maximum 1 additional pole per switch	
	<b>For frame 1 switch-disconnectors</b>	
1P	In	Number of modules
424204	32 A	1
424205	40 A	1
424206	63 A	1
	<b>For frame 2 switch-disconnectors</b>	
424219	100 A	1.5
424220	125 A	1.5
424221	160 A	1.5

Ref.	<b>Transfer switching equipment</b>			
	Category of use: AC33 A/B (415 V~) Internal mechanism is independent from the velocity of handle rotation Padlockable handle in open position (Ø 6 mm padlock) Cage terminals Accept copper and aluminium cables Can be equipped with up to 4 auxiliary contacts (ref. 424208), 2 contacts on each side			
	<b>Frame 1 - 63 A</b>			
	Width: 1 module per pole			
	In	Position of the handle	Connection	Number of modules
3P				
424100	32 A	I - O - II		6   8
424101	40 A	I - O - II		6   8
424102	63 A	I - O - II		6   8
	<b>Frame 2 - 160 A</b>			
	Width: 1.5 module per pole			
	In	Position of the handle	Connection	Number of modules
424103	100 A	I - O - II		9   12
424104	125 A	I - O - II		9   12
424105	160 A	I - O - II		9   12

Ref.	<b>Auxiliary contacts (NO+NC)</b>	
	For DSX switch-disconnectors and transfer switching equipment 5 A - 230 V~ Can be mounted on both sides of the switches Maximum 4 auxiliaries per switch (2 on each side) Width: 0.5 modules	
424208	Simultaneous auxiliary Indicates the state of the contacts	

# DSX switch-disconnectors and transfer switching equipment

└ rail mounting version - accessories



Ref.	Rotary handles
	For front operation
	<b>Direct handles for switch-disconnectors</b>
424215	Standard (black)
424216	For emergency use (red)
	<b>Direct handles for transfer switching equipment</b>
424217	Standard (black)
424218	For emergency use (red)
	<b>Vari-depth handles for switch-disconnectors and transfer switching equipment</b>
	IP 55 external handles
	Comprising: connection rod, bracket, self-adhesive drilling template, mounting accessories and door lock mechanism
	Padlockable in open position (up to 3 padlocks Ø 8 mm)
424209	Standard (black)
424210	For emergency use (red/yellow)

Ref.	Sealable terminal shields - IP 30
	For DSX switch-disconnectors and transfer switching equipment
	Set of 2
	<b>For frame 1</b>
424203	For 1-pole switches
424202	For 3-pole switches
	<b>For frame 2</b>
424214	For 1-pole switches
424213	For 3-pole switches

Ref.	Bridging links for transfer switching equipment
	<b>For frame 1</b>
424200	For 3-pole switches. Set of 3
424201	For 4-pole switches. Set of 4
	<b>For frame 2</b>
424211	For 3-pole switches. Set of 3
424212	For 4-pole switches. Set of 4

# DSX switch-disconnectors and transfer switching equipment

technical characteristics

## Technical characteristics

### Switch-disconnectors

		Frame 1 - 63 A			Frame 2 - 160 A			
Rated current In (A)		32	40	63	100	125	160	
Number of poles		3, 4			3, 4			
Rated insulation voltage Ui (V)		690			690			
Rated impulse withstand voltage Uimp (kV)		8			8			
Dielectric strength 50 Hz 1 min (kV)		6			6			
Rated operational voltage (AC) Ue (V)		690			690			
Rated operational voltage (DC) Ue (V)		250			250			
Category of use:	AC 20 A/B	415 V~	32	40	63	100	125	160
	AC 21 A/B		32	40	63	100	125	160
	AC 22 A/B		32	40	63	100	125	160
	AC 23 A/B		32	40	63	100	125	160
	AC 20 A/B	690 V~	32	40	63	100	125	160
	AC 21 A/B		32	40	63	100	125	160
	AC 22 A/B		32	40	40	100	125	125
	AC 23 A/B	250 V=	25	25	25	63	63	63
	DC 20 A/B		32	40	63	100	125	160
	DC 21 A/B		32	40	63	100	125	160
	DC 22 A/B	250 V=	32	40	40	100	125	125
	DC 23 A/B		25	25	25	63	63	63
Short circuit making capacity Icm (kA)		2,1			4,5			
Maximal withstand peak current (while protection breaks short circuit) (kA)		12			14			
Short time withstand current (1 s) Icw (kA)		1,5			3,0			
Mechanical endurance (No. of operations)		20000			15000			
Electrical endurance (No. of operations)		2500			2500			
Rated Ambient temperature Ta (°C)		40/50			40/50			
Temperature Withstand range (°C)		-50/+70			-50/+70			
Terminal type		Cage			Cage			
Maximal copper cable mm²		35 / 50			70 / 95			

### Transfer switching equipment

		Frame 1 - 63 A			Frame 2 - 160 A			
Rated current In (A)		32	40	63	100	125	160	
Number of poles		3, 4			3, 4			
Rated insulation voltage Ui (V)		690			690			
Rated impulse withstand voltage Uimp (kV)		8			8			
Dielectric strength 50 Hz 1 min (kV)		6			6			
Rated operational voltage (AC) Ue (V)		690			690			
Rated operational voltage (DC) Ue (V)		250			250			
Category of use:	AC 20 A/B	415 V~	32	40	63	100	125	160
	AC 21 A/B		32	40	63	100	125	160
	AC 22 A/B		32	40	63	100	125	160
	AC 23 A/B		32	40	63	100	125	160
	AC 20 A/B	690 V~	32	40	63	100	125	160
	AC 21 A/B		32	40	63	100	125	160
	AC 22 A/B		32	40	40	100	125	125
	AC 23 A/B	250 V=	25	25	25	63	63	63
	DC 20 A/B		32	40	63	100	125	160
	DC 21 A/B		32	40	63	100	125	160
	DC 22 A/B	250 V=	32	40	40	100	125	125
	DC 23 A/B		25	25	25	63	63	63
Short circuit making capacity Icm (kA)		2,1			4,5			
Maximal withstand peak current (while protection breaks short circuit) (kA)		12			14			
Short time withstand current (1 s) Icw (kA)		1,5			3,0			
Mechanical endurance (No. of operations)		20000			15000			
Electrical endurance (No. of operations)		2500			2500			
Rated Ambient temperature Ta (°C)		40/50			40/50			
Temperature Withstand range (°C)		-50/+70			-50/+70			
Terminal type		Cage			Cage			
Maximal copper cable mm²		35 / 50			70 / 95			

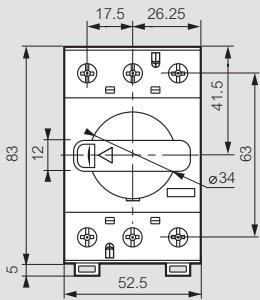
# DSX switch-disconnectors and transfer switching equipment

└ rail mounting

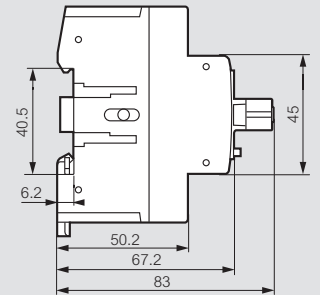
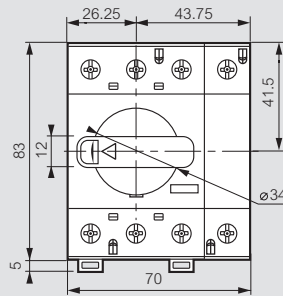
## ■ Dimensions (mm)

### Switch-disconnectors

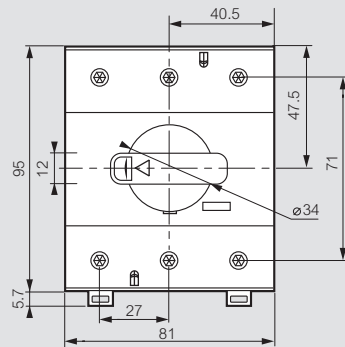
Frame 1, 3-pole ref. 424000/01/02



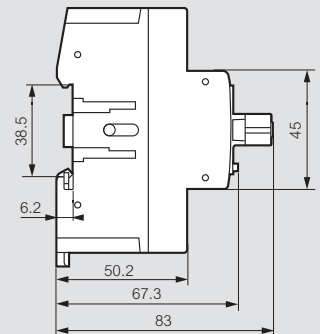
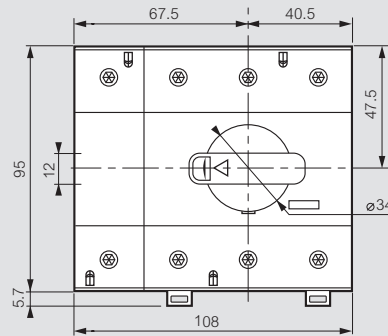
Frame 1, 3P+N with ref. 424204/05/06



Frame 2, 3-pole ref. 424003/04/05

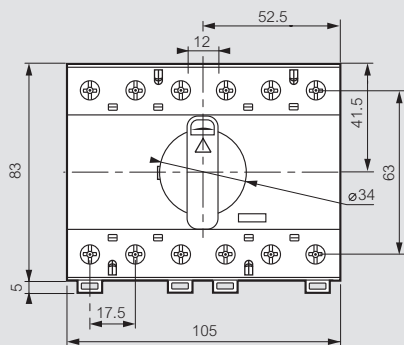


Frame 2, 3P+N with ref. 424219/20/21

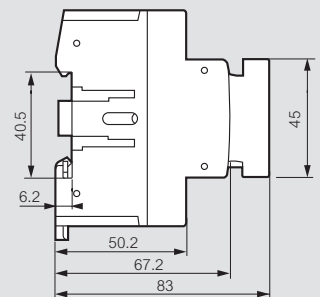
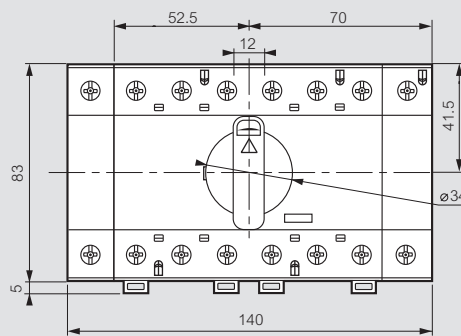


### Transfer switching equipment

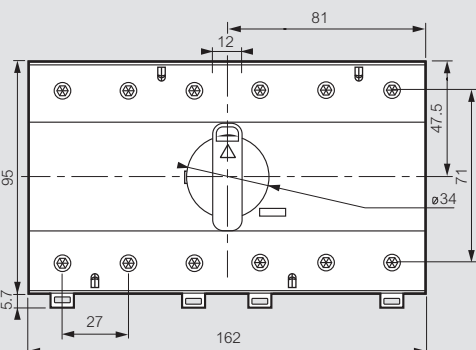
Frame 1, 3-pole, ref. 424100/01/02



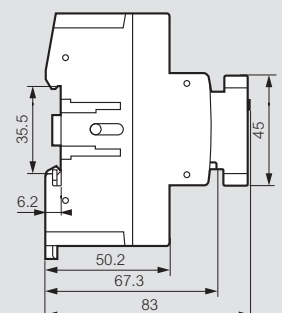
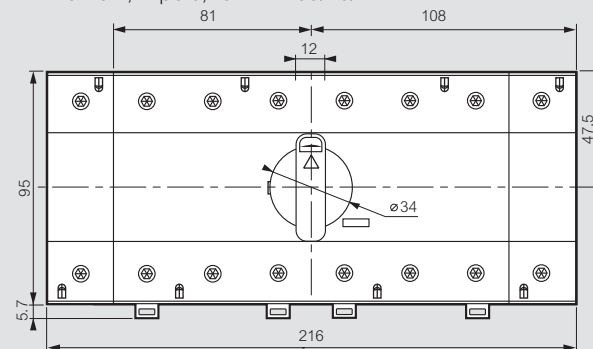
Frame 1, 4-pole, ref. 424106/07/08



Frame 2, 3-pole, ref. 424103/04/05



Frame 2, 4-pole, ref. 424109/46/47





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