



CIRCUIT-BREAKER SIZE S2. FOR MOTOR PROTECTION,
CLASS 10, A-REL. 40...50A, N-REL. 650A,
SCREW TERMINAL,
STANDARD SWITCHING CAPACITY

General technical data:

Product brand name		SIRIUS
Product designation		circuit breaker
Size of the circuit-breaker		S2
Trip class		CLASS 10
Degree of pollution		3
Altitude of installation site / at a height over sea level / maximum	m	2,000
Protection class IP / frontal/front side		IP20
Ambient temperature		
• during storage	°C	-50...80
• during the operating phase	°C	-20...70
• during transport	°C	80...-50
Resistance against shock		25g / 11 ms
Insulation voltage / rated value	V	690
Impulse voltage resistance / rated value	kV	6
Real loss power / total / typical	W	20
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		Q
• according to DIN EN 61346-2		Q

Mechanical switching cycle as operating period / of the main contacts / typical		50,000
Type of the driving mechanism / Motor drive		No
design of the operating mechanism		selector switch
Product function		
• Overload protection		Yes
• Short-circuit to earth recognition		No
• Phase disturbance recognition		Yes
Product component / auxiliary switch		No
Product component / Undervoltage release mechanism		No
Product component / trip indicator		No
Product extension / optional / Motor drive		Yes

Main circuit:

Number of poles / for main current circuit		3
Type of voltage		AC/DC
Operating voltage / at 3 AC / rated value / maximum	V	690
Operating current / at AC-3 / at 400 V / rated value	A	50
Service power / at AC-3		
• at 400 V / rated value	kW	22
Switching frequency / at AC-3 / according to IEC 60947-6-2 / maximum	1/h	15
Arrangement of electrical connectors / for main current circuit		front side
Adjustable response current		
• of the non-delayed short-circuit release	A	650...650
Adjustable response current		
• of the current-dependent overload release	A	40...50
Continuous current / rated value	A	50
Product extension / auxiliary switch		Yes

Auxiliary circuit:

Number of NC contacts / for auxiliary contacts / instantaneous switching		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		0
Number of change-over switches / for auxiliary contact		0

Inputs/ Outputs:

Number of digital inputs		0
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Short-circuit:

Switch-off capacity limit short-circuit current		
• at 400 V / rated value	kA	50

<ul style="list-style-type: none"> • at 500 V / rated value 	kA	10
<ul style="list-style-type: none"> • at 690 V / rated value 	kA	4
Design of the overcurrent release and short-circuit release		thermomagnetic

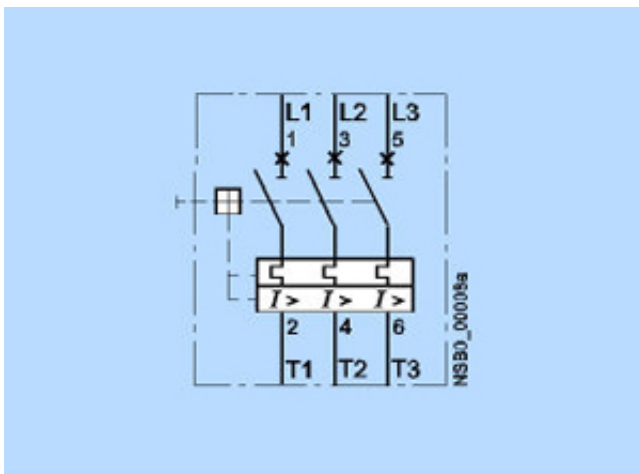
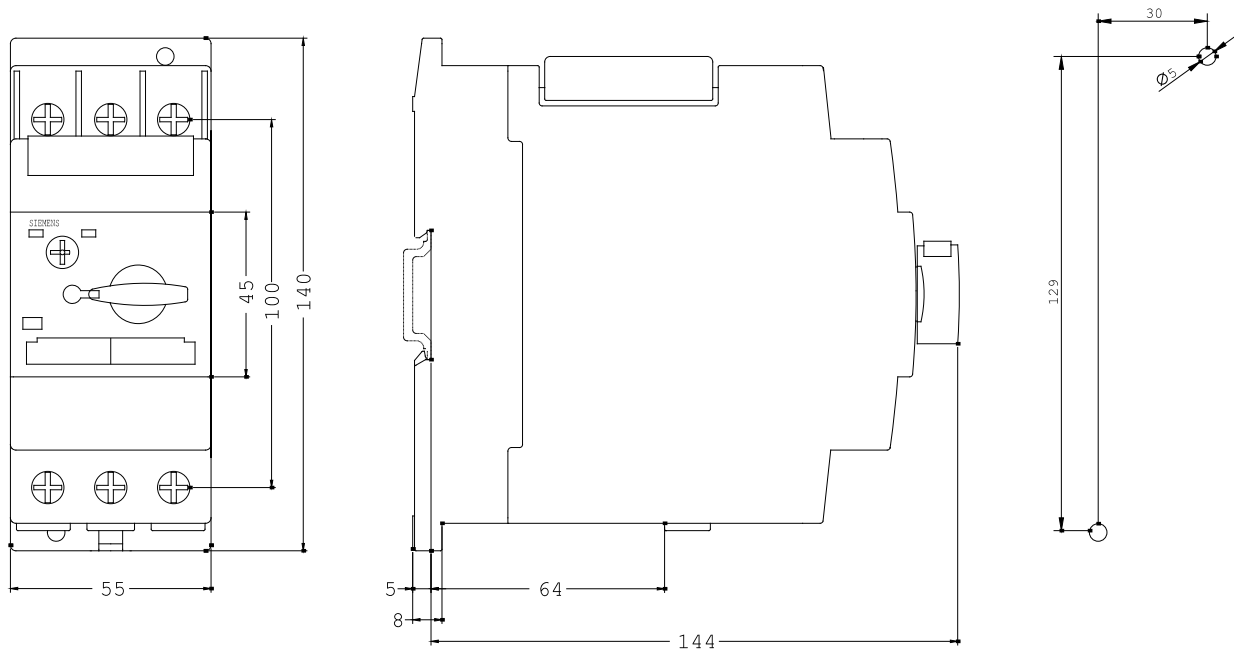
Installation/mounting/dimensions:		
built in orientation		any
Type of fixing/fixation		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Width	mm	55
Height	mm	140
Depth	mm	149
distance, to be maintained, to the ranks assembly		
<ul style="list-style-type: none"> • backwards 	mm	0
<ul style="list-style-type: none"> • sideways 	mm	0
Product function / removable terminal for auxiliary and control circuit		No

Connections:		
Design of the electrical connection		
<ul style="list-style-type: none"> • for main current circuit 		screw-type terminals with box terminals
Type of the connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> • unifilar • stranded wire • stranded wire <ul style="list-style-type: none"> • with conductor end processing • at AWG-conductors / for main contacts 		2x (0.75 ... 16 mm ²) 2x (0.75 ... 25 mm ²), 0.75 ... 35 mm ² 2x (0.75 ... 16 mm ²), 0.75 ... 25 mm ² 2x (18 ... 2), 1x (18 ... 2)
Conductor cross section that can be connected / for main contacts		
<ul style="list-style-type: none"> • unifilar 	mm ²	0.75...16
<ul style="list-style-type: none"> • stranded wire 	mm ²	0.75...35
<ul style="list-style-type: none"> • stranded wire <ul style="list-style-type: none"> • with conductor end processing 	mm ²	0.75...25
AWG number / as coded connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts 		18...2

Safety:		
Protection against electrical shock		finger-safe

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/lowvoltage/catalogs>



last change:

07/27/2009