



CIRCUIT-BREAKER SIZE S3,
FOR MOTOR PROTECTION, CLASS 10,
A-REL. 36...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		S3
Trip class		CLASS 10
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Protection class IP / on the front		IP20
Ambient temperature		
• during storage	°C	-50 ... +80
• during operating	°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	V	6,000
Active power loss / 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 operating cycles as operating time / 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
• phase disturbance recognition		Yes
Product component		
• auxiliary switch		No
• undervoltage release mechanism		No
• 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 AC-3 / 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
Frequency of operation / 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	36 ... 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 contacts		0

Inputs/ Outputs:

Number of digital inputs		0
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Short-circuit:

Breaking capacity limit short-circuit current (I_{cu})		
• at 400 V / rated value	kA	50

<ul style="list-style-type: none"> • at 500 V / rated value 	kA	12
<ul style="list-style-type: none"> • at 690 V / rated value 	kA	6
Design of the electrical connection / for auxiliary and control current circuit		screw-type terminals
Design of the overcurrent release and short-circuit release		thermomagnetic

Installation/mounting/dimensions:

Built in orientation		any
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Width	mm	70
Height	mm	165
Depth	mm	174
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"> • solid • stranded • finely stranded <ul style="list-style-type: none"> • with conductor end processing • for AWG conductors / for main contacts 		2x (2.5 ... 16 mm ²) 2x (10 ... 50 mm ²), 10 ... 70 mm ² 2x (2.5 ... 35 mm ²), 2.5 ... 50 mm ² 2x (10 ... 1), 1x (10 ... 2)
Conductor cross section that can be connected / for main contacts		
<ul style="list-style-type: none"> • solid 	mm ²	2.5 ... 16
<ul style="list-style-type: none"> • stranded 	mm ²	10 ... 70
<ul style="list-style-type: none"> • stranded wire <ul style="list-style-type: none"> • with conductor end processing 	mm ²	2.5 ... 50

Certificates/approvals:

General Product Approval

For use in hazardous locations



CQC



CSA

[KETI](#)

[ROSTEST](#)



UL

[DEKRA EXAM, DMT](#)

Test Certificates

[Manufacturer](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



RMRS

other

[Manufacturer](#)

[other](#)

Safety:

Protection against electrical shock

finger-safe

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

CAX-Online-Generator

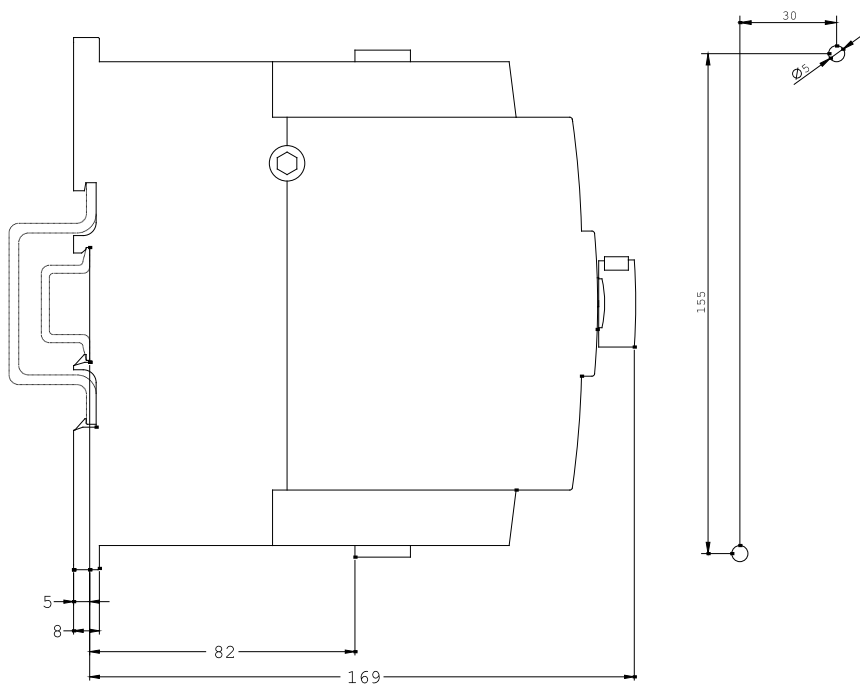
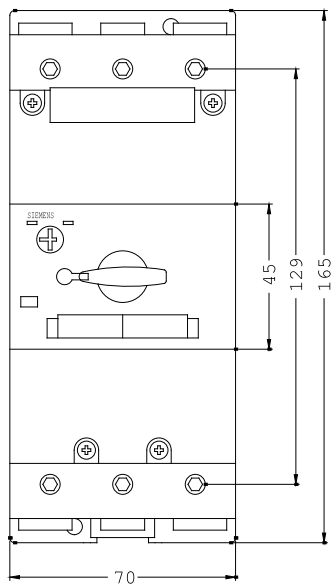
<http://www.siemens.com/cax>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RV1041-4HA10/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RV1041-4HA10



last change:

Feb 6, 2012