SIEMENS

Data sheet 3RW3028-1BB04

Siemens EcoTech

SIRIUS soft starter S0 38 A, 18.5 kW/400 V, 40 °C 200-480 V AC, 24 V AC/DC
Screw terminals



General technical data	
product brand name	SIRIUS
product designation	Soft starter
product feature	
● integrated bypass contact system	Yes
● thyristors	Yes
product function	
● intrinsic device protection	No
● motor overload protection	No
● evaluation of thermistor motor protection	No
● external reset	No
● adjustable current limitation	No
● inside-delta circuit	No
product component motor brake output	No
insulation voltage rated value	600 V
degree of pollution	3, acc. to IEC 60947-4-2
blocking voltage of the thyristor maximum	1 600 V
reference code according to EN 61346-2	Q
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	G
Power Electronics	
operational current	
● at 40 °C rated value	38 A
● at 50 °C rated value	34 A
● at 60 °C rated value	31 A
yielded mechanical performance for 3-phase motors	
● at 230 V	
— at standard circuit at 40 °C rated value	11 kW
● at 400 V	
— at standard circuit at 40 °C rated value	18.5 kW
yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value	10 hp
operating frequency rated value	50 ... 60 Hz
relative negative tolerance of the operating frequency	-10 %
relative positive tolerance of the operating frequency	10 %
operating voltage at standard circuit rated value	200 ... 480 V
relative negative tolerance of the operating voltage at	-15 %

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standard circuit	
relative positive tolerance of the operating voltage at standard circuit	10 %
minimum load [%]	10 %
continuous operating current [% of Ie] at 40 °C	115 %
power loss [W] at operational current at 40 °C during operation typical	19 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage frequency 1 rated value	50 Hz
control supply voltage frequency 2 rated value	60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage 1 at AC	
● at 50 Hz rated value	24 V
● at 60 Hz rated value	24 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %
control supply voltage 1 at DC rated value	24 V
relative negative tolerance of the control supply voltage at DC	-20 %
relative positive tolerance of the control supply voltage at DC	20 %
display version for fault signal	red
Mechanical data	
size of engine control device	S0
width	45 mm
height	125 mm
depth	150 mm
fastening method	screw and snap-on mounting
mounting position	With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back
required spacing with side-by-side mounting	
● upwards	60 mm
● at the side	15 mm
● downwards	40 mm
wire length maximum	300 m
number of poles for main current circuit	3
Connections/ Terminals	
type of electrical connection	
● for main current circuit	screw-type terminals
● for auxiliary and control circuit	screw-type terminals
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point	
● solid	2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)
● finely stranded with core end processing	2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)
type of connectable conductor cross-sections for AWG cables for main contacts for box terminal	
● using the front clamping point	1x 8, 2x (16 ... 10)
type of connectable conductor cross-sections for auxiliary contacts	
● solid	2x (0.5 ... 2.5 mm²)

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● finely stranded with core end processing	2x (0.5 ... 1.5 mm²)
type of connectable conductor cross-sections for AWG cables	
● for auxiliary contacts	2x (20 ... 14)
● for auxiliary contacts finely stranded with core end processing	2x (20 ... 16)

Ambient conditions

installation altitude at height above sea level	5 000 m
environmental category	
● during transport according to IEC 60721	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
● during storage according to IEC 60721	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
● during operation according to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
ambient temperature	
● during operation	-25 ... +60 °C
● during storage	-40 ... +80 °C
derating temperature	40 °C
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front

UL/CSA ratings

yielded mechanical performance [hp] for 3-phase AC motor	
● **at 220/230 V**	
— at standard circuit at 50 °C rated value	10 hp
● **at 460/480 V**	
— at standard circuit at 50 °C rated value	25 hp
contact rating of auxiliary contacts according to UL	B300 / R300

Approvals Certificates

Environmental Product Declaration	
● global warming potential [CO2 eq] / during manufacturing	11 kg
● global warming potential [CO2 eq] / during sales	0.151 kg
● global warming potential [CO2 eq] / during operation	128 kg
● global warming potential [CO2 eq] / after end of life	-2.27 kg
● global warming potential [CO2 eq] / total	137 kg

Environment

Environmental Confirmations

General Product Approval

General Product Approval

EMV

Test Certificates

Type Test Certificates/Test Report

other

Confirmation

other

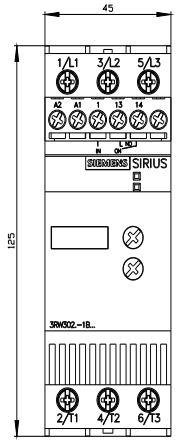
Miscellaneous

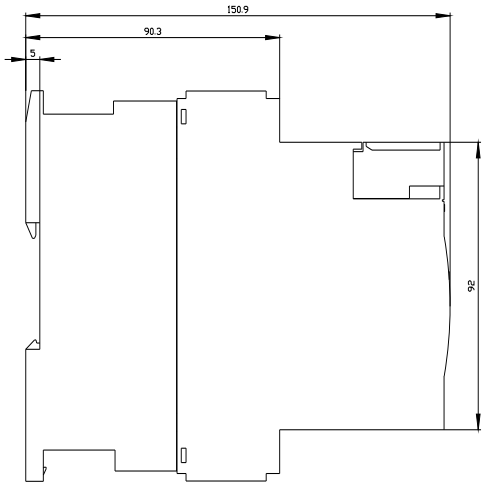
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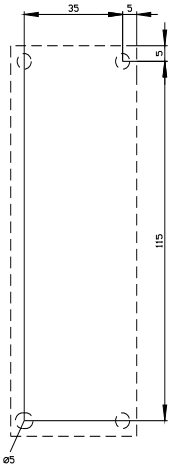
Simulation Tool for Soft Starters (STS)
https://support.industry.siemens.com/cs/ww/en/view/101494917
Information on the packaging
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Information for data generation and storage
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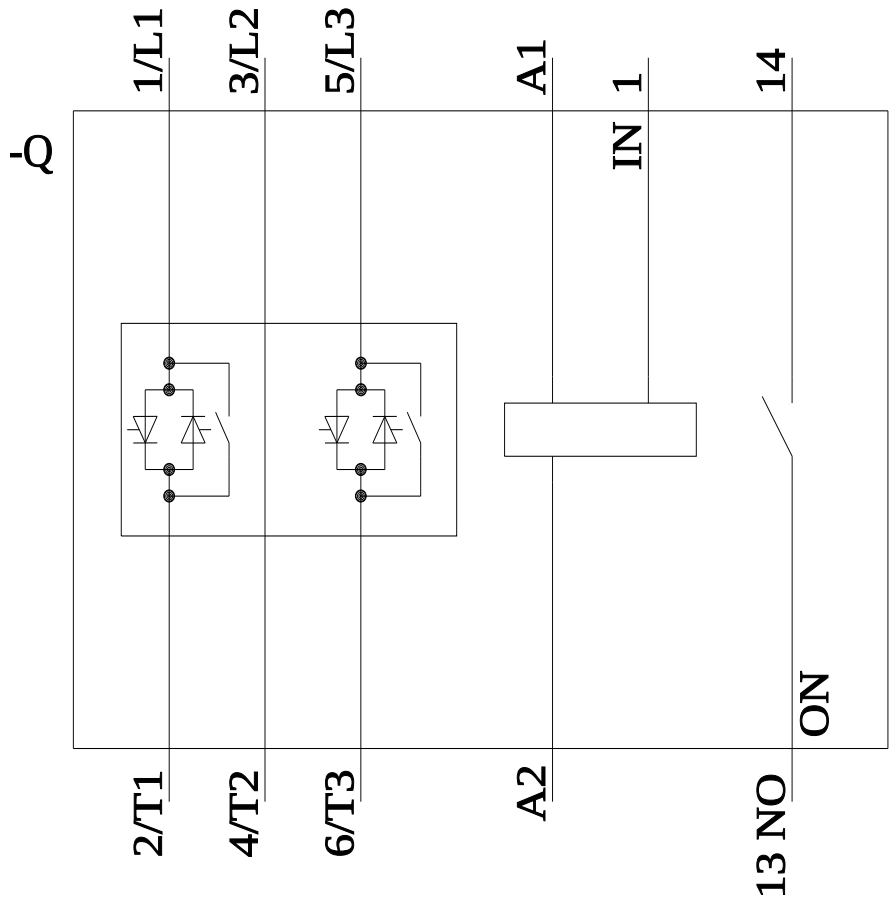
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