SIEMENS

Data sheet 3RT2038-1NB30



Power contactor, AC-3 80 A, 37 kW / 400 V 1 NO + 1 NC, 20-33 V AC/DC with varistor 3-pole, size S2 screw terminals

product type designation product type designation general technical data size of contactor product extension • function module for communication • auxillary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical insulation voltage • of main circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of auxillary circuit rated value surge voltage resistance • of main circuit rated value • of auxillary circuit rated value • of auxillary circuit rated value shock resistance at rectangular impulse • at AC • at DC shock resistance at rectangular impulse • at AC • at DC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical	product brand name	SIRIUS
Size of contactor	product designation	Power contactor
size of contactor product extension • function module for communication • function module for communication • auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary oblique for safe isolation between coll and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC • at DC shock resistance with sine pulse • at AC • at DC shock resistance with sine pulse • at AC • at DC contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical arxivery of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical arxivery of the contactor with added auxiliary switch block typical of the contactor with adde	product type designation	3RT2
product extension • function module for communication • auxillary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit tated value • of auxiliary circuit rated value • of main circuit rated value • of auxiliary circuit rated value • of x, 7g / 5 ms, 4.5g / 10 ms • at AC • at DC shock resistance at rectangular impulse • at AC • at DC shock resistance with sine pulse • at AC • at DC shock resistance with sine pulse • at AC • at DC contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block pipcal reference code according to IEC 81346-2 Q Substance Prohibitance (Date) • during operation vegeta 2000 m ambient temperature • during operation	General technical data	
• function module for communication • auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state	size of contactor	S2
auxiliary switch power loss [W] for rated value of the current at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of main circuit rated value of auxiliary switch block typical of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical	product extension	
power loss [W] for rated value of the current at AC in hot operating state 17.1 W at AC in hot operating state per pole without load current share typical of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value for auxiliary circuit rated value of auxiliary circuit rated value for auxiliary circuit rated value	 function module for communication 	No
at AC in hot operating state per pole bit AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of avxiliary avxiliary insulated avxiliary insulated avxiliary switch sine pulse of the contactor with added electronically optimized avxiliary switch block typical of the contactor with added electronically optimized avxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with	auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value food without rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of avxiliary sible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC of at AC of at AC of at AC of the contactor with sine pulse of the contactor lipical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation 5.7.7 W 5.7 W	power loss [W] for rated value of the current	
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of a with a contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC of at DC of at DC of contactor with sine pulse of contactor vith sine pulse of contactor vith added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block	 at AC in hot operating state 	17.1 W
insulation voltage	 at AC in hot operating state per pole 	5.7 W
of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value active of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary sible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC of contactor with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added a	 without load current share typical 	2 W
of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary conditions of contactor according to EN 60947-1 shock resistance with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) installation altitude at height above sea level maximum ambient temperature oduring operation -25 +60 °C	insulation voltage	
surge voltage resistance	 of main circuit with degree of pollution 3 rated value 	690 V
of main circuit rated value of auxiliary circuit rated value adwinimum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse o at AC o at DC o at DC shock resistance with sine pulse ot AC ot AC A		690 V
of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse oat AC oat DC at DC at DC of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) installation altitude at height above sea level maximum ambient temperature oduring operation od the contactor with added auxiliary aux	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC • at DC shock resistance with sine pulse • at AC • at DC shock resistance with sine pulse • at AC • at DC at AC • at DC 12g / 5 ms, 4.5g / 10 ms 12g / 5 ms, 7g / 10 ms 12g / 5 ms, 7g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation 400 V 7.7g / 5 ms, 4.5g / 10 ms 12g / 5 ms, 7g / 10 ms	 of main circuit rated value 	6 kV
shock resistance at rectangular impulse • at AC • at DC **Nock resistance with sine pulse • at AC • at DC **Nock resistance with sine pulse • at AC • at DC **Nock resistance with sine pulse • at AC • at DC **Tog / 5 ms, 4.5g / 10 ms **Tog / 5 ms, 7g / 10 ms **Tog	of auxiliary circuit rated value	6 kV
 at AC at DC 7.7g / 5 ms, 4.5g / 10 ms shock resistance with sine pulse at AC at DC 12g / 5 ms, 7g / 10 ms at DC 12g / 5 ms, 7g / 10 ms of contactor typical (switching cycles) of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C 		400 V
at DC shock resistance with sine pulse at AC at DC at	shock resistance at rectangular impulse	
shock resistance with sine pulse • at AC • at DC 12g / 5 ms, 7g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation 12g / 5 ms, 7g / 10 ms 10 000 000 10 000 000 10 000 000 10 000 00	• at AC	7.7g / 5 ms, 4.5g / 10 ms
 at AC at DC 12g / 5 ms, 7g / 10 ms mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation -25 +60 °C 	• at DC	7.7g / 5 ms, 4.5g / 10 ms
at DC mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation 12g / 5 ms, 7g / 10 ms 10 000 000 5 000 000 10 000 000 10 000 000 10 000 00	shock resistance with sine pulse	
mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation 10 000 000 10 000	• at AC	12g / 5 ms, 7g / 10 ms
 of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation 10 000 000 2 000 000 	• at DC	12g / 5 ms, 7g / 10 ms
of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation 5 000 000 10 000 000 10 000 000 10 000 00	mechanical service life (switching cycles)	
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation 10 000 000 10/001/2014 2 000 m 2 000 m	 of contactor typical 	10 000 000
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation -25 +60 °C		5 000 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation 10/01/2014 2 000 m -25 +60 °C		10 000 000
Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation -25 +60 °C	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation -25 +60 °C	Substance Prohibitance (Date)	10/01/2014
ambient temperature ● during operation -25 +60 °C	Ambient conditions	
• during operation -25 +60 °C	installation altitude at height above sea level maximum	2 000 m
	ambient temperature	
• during storage -55 +80 °C	 during operation 	-25 +60 °C
	during storage	-55 +80 °C

relative humidity minimum	10 %
relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	00 /0
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
 at AC-3e rated value maximum 	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 	90 A
 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C 	90 A 80 A
rated value	
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-3e	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
 at AC-4 at 400 V rated value 	55 A
 at AC-5a up to 690 V rated value 	79.2 A
 at AC-5b up to 400 V rated value 	66.4 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	70 A
 up to 400 V for current peak value n=20 rated value 	70 A
 up to 500 V for current peak value n=20 rated value 	70 A
 up to 690 V for current peak value n=20 rated value 	58 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	46.7 A
— up to 400 V for current peak value n=30 rated value	46.7 A
— up to 500 V for current peak value n=30 rated value	46.7 A
up to 690 V for current peak value n=30 rated value	46.7 A
minimum cross-section in main circuit at maximum AC-1 rated value	35 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	30 A
at 690 V rated value	24 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A

— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
	0.1 A
— at 440 V rated value	
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	37 kW
• at AC-3	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
at AC-3e	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
operating power for approx. 200000 operating cycles at AC-4	
at 400 V rated value	15.8 kW
at 690 V rated value	21.8 kW
operating apparent power at AC-6a	27.0 14/4
up to 230 V for current peak value n=20 rated value	27.8 kVA
up to 400 V for current peak value n=20 rated value	48.4 kVA
• up to 500 V for current peak value n=20 rated value	60.6 kVA
• up to 690 V for current peak value n=20 rated value	69.3 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	18.6 kVA
 up to 400 V for current peak value n=30 rated value 	32.3 kVA
• up to 500 V for current peak value n=30 rated value	40.4 kVA
• up to 690 V for current peak value n=30 rated value	55.8 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	1 298 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	898 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	640 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	414 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	333 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	1 500 1/h
- 40710	. 000 ///

• at DC	1 500 1/h
operating frequency	1 000 1/11
at AC-1 maximum	700 1/h
at AC-1 maximum at AC-2 maximum	350 1/h
at AC-2 maximum at AC-3 maximum	500 1/h
at AC-3 maximum at AC-3e maximum	500 1/h
at AC-3e maximum at AC-4 maximum	150 1/h
	100 1/11
Control circuit/ Control	AOIDO
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	20 22 1/
• at 50 Hz rated value	20 33 V
• at 60 Hz rated value	20 33 V
control supply voltage at DC	20 22 1/
• rated value	20 33 V
operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.8
full-scale value	1.1
operating range factor control supply voltage rated	
value of magnet coil at AC	
• at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
design of the surge suppressor	with varistor
inrush current peak	3 A
duration of inrush current peak	50 μs
locked-rotor current mean value	1 A
locked-rotor current peak	2.6 A
duration of locked-rotor current	230 ms
holding current mean value	40 mA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	40 VA
• at 60 Hz	40 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	2 VA
• at 60 Hz	2 VA
closing power of magnet coil at DC	23 W
holding power of magnet coil at DC	1 W
closing delay	
• at AC	35 110 ms
• at DC	35 110 ms
opening delay	
• at AC	30 55 ms
• at DC	30 55 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
 at 230 V rated value 	10 A
at 400 V rated value	3 A
 at 500 V rated value 	2 A
• at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
• at 110 V rated value	3 A

 at 125 V rated value 	2 A
 at 220 V rated value 	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
 at 48 V rated value 	2 A
at 60 V rated value	2 A
at 110 V rated value	1 A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	riddity switching per 100 million (17 V, 1 mill)
full-load current (FLA) for 3-phase AC motor	GE A
at 480 V rated value	65 A
at 600 V rated value	62 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	5 hp
— at 230 V rated value	15 hp
 for 3-phase AC motor 	
 at 200/208 V rated value 	20 hp
 at 220/230 V rated value 	25 hp
— at 460/480 V rated value	50 hp
— at 575/600 V rated value	60 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A
with type of doordination in equipe	(415 V, 80 kA)
— with type of assignment 2 required	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (415V,80kA)
 for short-circuit protection of the auxiliary switch 	gG: 10 A (500 V, 1 kA)
required	
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
side-by-side mounting	Yes
height	114 mm
width	55 mm
depth	130 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	10 mm
— upwards	10 mm
·	6 mm
— at the side	·
— at the side — downwards	10 mm
— downwards	10 mm
downwardsfor live parts	
— downwards● for live parts— forwards	10 mm
— downwards• for live parts— forwards— upwards	10 mm 10 mm
 downwards for live parts forwards upwards downwards 	10 mm 10 mm 10 mm
— downwards• for live parts— forwards— upwards	10 mm 10 mm

type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control circuit 	screw-type terminals
 at contactor for auxiliary contacts 	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	
 solid or stranded 	2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
 at AWG cables for main contacts 	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
 finely stranded with core end processing 	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm²
 finely stranded with core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
• for main contacts	18 1
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947- 5-1 	No
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 y
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
suitability for use	
 safety-related switching OFF 	Yes
Certificates/ approvals	

Certificates/ approvals

General Product Approval



Confirmation





Miscellaneous

<u>KC</u>

General Product
Approval

EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates





Type Examination Certificate



Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

Special Test Certific-<u>ate</u>











Marine / Shipping

other

Railway

Dangerous Good





Confirmation

Confirmation

Vibration and Shock

Transport Information

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2038-1NB30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2038-1NB30}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1NB30

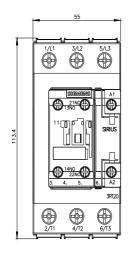
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

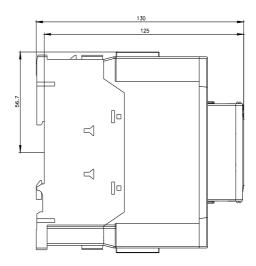
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2038-1NB30&lang=en

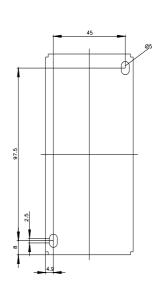
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1NB30/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-1NB30&objecttype=14&gridview=view1







last modified:

2/15/2022