SIEMENS



Reference: 3RT1517-1BG40

CONTACTOR, AC-3 5.5KW/400 V, AC-1 22 A, DC 125 V, 4-POLE, 2 NO + 2 NC, SIZE S00, SCREW CONNECTION

Buy it at Electric Automation Network



product brand name	SIRIUS	
Product designation	power contactor	
General technical data:		
Size of contactor	500	
Insulation voltage		
rated value	690 V	
Degree of pollution	3	
Protection class IP		
on the front	IP20	
Mechanical service life (switching cycles)		
of contactor typical	30 000 000	
of the contactor with atd>	5 000 000	
of the contactor with atd>	10 000 000	
Ambient conditions:		
Installation altitude at height above sea level maximum	2 000 m	
Ambient temperature		
during operation	-25 +60 °C	
during storage	-55 +80 °C	
Main circuit:		
Number of NO contacts for main contacts	2	
Number of NC contacts for main contacts	2	

Operating current	
at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	20 A
at AC-2 at AC-3 at 400 V	
— per NO contact rated value	12 A
— per NC contact rated value	12 A
Connectable conductor cross-section in main circuit at AC-1	
at 60 °C minimum permissible	2.5 mm ²
at 40 °C minimum permissible	2.5 mm ²
Operating current	
at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
Operating current	
at 1 current path at DC-3 at DC-5	
— at 24 V per NC contact rated value	20 A
— at 24 V per NO contact rated value	20 A
— at 110 V per NC contact rated value	0.075 A
— at 110 V per NO contact rated value	0.15 A
— at 220 V per NC contact rated value	0.375 A
— at 220 V per NO contact rated value	0.75 A
with 2 current paths in series at DC-3 at DC-5	
— at 110 V per NC contact rated value	0.175 A
— at 110 V per NO contact rated value	0.35 A
— at 24 V per NC contact rated value	20 A
— at 24 V per NO contact rated value	20 A
Operating power	
at AC-1	

at 200 V rated value at AC-2 at AC-3 — at 230 V per NC contact rated value at AC-2 at AC-3 — at 230 V per NC contact rated value at 400 V per NC contact rated value at 400 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW Power loss IWI at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency at AC-1 maximum 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC Closing power of magnet coil at DC 3.3 W Closing delay at AC 4 30 ms at DC Opening delay at AC at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal cost at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Operating current at AC-12 maximum Operating current at AC-12 maximum Operating current at AC-15	— at 230 V rated value	7.5 kW
at AC-2 at AC-3 — at 230 V per NC contact rated value 3 kW — at 230 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 0.7 w Operating frequency 1000 Info Info Info Info Info Info Info Info		
— at 230 V per NC contact rated value 3 kW — at 230 V per NO contact rated value 3 kW — at 400 V per NC contact rated value 5.5 kW — at 400 V per NC contact rated value 5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 0 Operating frequency 1000 I/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value 125 V Operating range factor control supply voltage at DC rated value 125 V Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay 3.3 W at AC 8.3 35 ms at DC 25 100 ms Opening delay 3 at AC 4 30 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal 40- at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts or instantaneous contact 0 Number of NO contacts or instantaneous contact 0 Operating current at AC-12 maximum 10 A		13 KW
— at 230 V per NO contact rated value 3 kW — at 400 V per NC contact rated value 5.5 kW — at 400 V per NO contact rated value 5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency 1000 I/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value 125 V Operating range factor control supply voltage at DC rated value 0.85 1.1 Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay 8 35 ms at DC 25 100 ms Opening delay at AC 4 30 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> <		
— at 400 V per NC contact rated value 5.5 kW — at 400 V per NO contact rated value 5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 0.7 W Operating frequency at AC-1 maximum 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value Operating range factor control supply voltage rated 0.85 1.1 Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC 8 35 ms at DC 25 100 ms Opening delay at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal 40> at DC at 24 V maximum permissible 0.01 A Auxillary circuit: Number of NC contacts for auxillary contacts — instantaneous contact 0 Operating current at AC-12 maximum 10 A	<u> </u>	
— at 400 V per NO contact rated value 5.5 kW Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor 0.7 W Operating frequency 1 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value 125 V Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay 3 8 35 ms 4		3 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor Operating frequency at AC-1 maximum 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC 4 35 ms at DC Opening delay at AC 4 30 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxillary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 poperating current at AC-12 maximum 10 A Operating current at AC-12 maximum 10 A	— at 400 V per NC contact rated value	5.5 kW
operating current per conductor Operating frequency at AC-1 maximum 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage Control supply voltage at DC rated value Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC at DC Opening delay at AC 4 30 ms at DC Arcing time Control version of the switch operating mechanism Residual current of the electronics for control with signal <0>	— at 400 V per NO contact rated value	5.5 kW
at AC-1 maximum 1 000 1/h Control circuit/ Control: Type of voltage of the control supply voltage DC Control supply voltage at DC rated value 125 V Operating range factor control supply voltage rated value of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay 3.4 AC 835 ms at DC 25100 ms Opening delay 430 ms Arcing time 1015 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0>		0.7 W
Control circuit/ Control: Type of voltage of the control supply voltage Control supply voltage at DC rated value Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC As 3.3 W Holding power of magnet coil at DC Closing delay at AC at DC Opening delay at AC at DC Touring time Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> Col at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts - instantaneous contact Operating current at AC-12 maximum 10 A Description DC 125 V 0.85 1.1 125 V 125	Operating frequency	
Type of voltage of the control supply voltage Control supply voltage at DC rated value Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC at DC Openating delay at AC 4 30 ms Arcing time Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts for auxiliary contacts - instantaneous contact Number of NO contacts for auxiliary contacts - instantaneous contact Operating current at AC-12 maximum 10 A	at AC-1 maximum	1 000 1/h
Control supply voltage at DC rated value 125 V Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC 8 35 ms at DC 25 100 ms Opening delay at AC 4 30 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact Number of NO contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	Control circuit/ Control:	
rated value 125 V Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC 8 35 ms at DC Opening delay at AC 4 30 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	Type of voltage of the control supply voltage	DC
Operating range factor control supply voltage rated value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC at DC Opening delay at AC 4 30 ms Arcing time Control version of the switch operating mechanism Control version of the electronics for control with signal <0 conventional Residual current of the electronics for control with signal <0 conventional Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A 10 A	Control supply voltage at DC	
value of magnet coil at DC Closing power of magnet coil at DC 3.3 W Holding power of magnet coil at DC 3.3 W Closing delay at AC at DC Opening delay at AC 4 30 ms at DC Arcing time Control version of the switch operating mechanism Control version of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A 10 A 10 M 10	rated value	125 V
Holding power of magnet coil at DC Closing delay at AC at DC 25 100 ms Opening delay at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts - instantaneous contact Departing current at AC-12 maximum 10 A		0.85 1.1
at AC 8 35 ms at DC 25 100 ms Opening delay at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts - instantaneous contact 0 Operating current at AC-12 maximum 10 A	Closing power of magnet coil at DC	3.3 W
at AC 8 35 ms at DC 25 100 ms Opening delay at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact for auxiliary contacts — instantaneous contact — instantaneous contact Operating current at AC-12 maximum 10 A	Holding power of magnet coil at DC	3.3 W
at DC Opening delay at AC at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact for auxiliary contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	Closing delay	
Opening delay at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	at AC	8 35 ms
at AC 4 30 ms at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts — instantaneous contact 0 Operating current at AC-12 maximum 10 A	at DC	25 100 ms
at DC 7 10 ms Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts — instantaneous contact 0 Operating current at AC-12 maximum 10 A	Opening delay	
Arcing time 10 15 ms Control version of the switch operating mechanism conventional Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact for auxiliary contacts for auxiliary contacts for auxiliary contacts — instantaneous contact O Operating current at AC-12 maximum 10 A	at AC	4 30 ms
Control version of the switch operating mechanism Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts O Operating current at AC-12 maximum conventional	at DC	7 10 ms
Residual current of the electronics for control with signal <0> at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts O O Operating current at AC-12 maximum 10 A	Arcing time	10 15 ms
at DC at 24 V maximum permissible 0.01 A Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts for auxiliary contacts O Derating current at AC-12 maximum 10 A	Control version of the switch operating mechanism	conventional
Auxiliary circuit: Number of NC contacts for auxiliary contacts — instantaneous contact for auxiliary contacts for auxiliary contacts for auxiliary contacts O Operating current at AC-12 maximum 10 A	_	
Number of NC contacts for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts — instantaneous contact 0 Operating current at AC-12 maximum 10 A	at DC at 24 V maximum permissible	0.01 A
for auxiliary contacts — instantaneous contact 0 Number of NO contacts for auxiliary contacts — instantaneous contact 0 Operating current at AC-12 maximum 10 A	Auxiliary circuit:	
 instantaneous contact Number of NO contacts for auxiliary contacts instantaneous contact Operating current at AC-12 maximum 10 A 	Number of NC contacts	
Number of NO contacts for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	for auxiliary contacts	
for auxiliary contacts — instantaneous contact Operating current at AC-12 maximum 10 A	— instantaneous contact	0
 instantaneous contact Operating current at AC-12 maximum 10 A 	Number of NO contacts	
Operating current at AC-12 maximum 10 A	for auxiliary contacts	
	— instantaneous contact	0
Operating current at AC-15	Operating current at AC-12 maximum	10 A
	Operating current at AC-15	

at 230 V rated value	6 A
at 400 V rated value	3 A
Operating current at DC-12	
at 60 V rated value	6 A
at 110 V rated value	3 A
at 220 V rated value	1 A
Operating current at DC-13	
at 24 V rated value	10 A
at 60 V rated value	2 A
at 110 V rated value	1 A
at 220 V rated value	0.3 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Short-circuit protection	
Design of the fuse link	
for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gL/gG: 35 A
— with type of assignment 2 required	fuse gL/gG: 20 A
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
Installation/ mounting/ dimensions:	
Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Side-by-side mounting	Yes
Height	57.5 mm
Witd>	45 mm
Depth	72 mm
Required spacing	
for grounded parts	
— at the side	6 mm
Connections/Terminals:	
Type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross-sections	
for main contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)

— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG conductors for main contacts	2x (20 16), 2x (18 14), 1x 12
Type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12
Safety related data:	
Failure rate [FIT]	
with low demand rate acc. to SN 31920	100 FIT