SIEMENS

Data sheet 3RT1056-2NF36



CONTACTOR, 90KW/400V/AC-3 AC(40...60HZ)/DC OPERATION UC 96-127V AUXILIARY CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR CONNECTIONS ELECTRONIC OPERATING MECHANISM WITH 24 V DC PLC INTERFACE CAGE CLAMP TERMINAL

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:		
Insulation voltage		
Rated value	V	1 000
Degree of pollution		3
Surge voltage resistance Rated value	kV	8
Mechanical service life (switching cycles)		
 of the contactor typical 		10 000 000
 of the contactor with added electronics- compatible auxiliary switch block typical 		5 000 000
 of the contactor with added auxiliary switch block typical 		10 000 000
Thermal short-time current restricted to 10 s	А	1 480
Protection class IP		
• on the front		IP00
• of the terminal		IP00
Equipment marking		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q
A.Alin almosta		

— at 400 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value • at AC-4 at 400 V Rated value • at CD-1 — at 24 V Rated value • at 110 V Rated value • at 10C-3 at DC-5 — at 24 V Rated value • at 10C-1 — at 24 V Rated value • at 10C-1 — at 24 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 10C-3 at DC-5 — at 110 V Rated value • at 24 V Rated value • at 10C-3 at DC-5 — at 10C-1 — at 24 V Rated value — at 24 V Rated value — at 24 V Rated value • at AC-1 at 400 V Rated value • at AC-1 at 400 V Rated value • at AC-1 at 400 V Rated value • at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value • at AC-3 • at 600 V Rated value • at 600 V Rated value — at 690 V Rated value • at 600 V Rated value	• at AC-1		
Rated value — up to 690 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value — at 690 V Rated value • at AC-4 at 400 V Rated value • at AC-4 at 400 V Rated value • at CD-1 — at 24 V Rated value — at 110 V Rated value • at DC-3 — at 24 V Rated value — at 110 V Rated value • at DC-3 — at 24 V Rated value — at 110 V Rated value • at DC-3 — at 24 V Rated value — at 110 V Rated value • at DC-3 — at 24 V Rated value — at 110 V Rated value • at DC-3 — at 24 V Rated value • at DC-3 — at 24 V Rated value • at DC-3 — at 24 V Rated value • at DC-3 — at 110 V Rated value • at DC-3 — at 24 V Rated value • at DC-3 • at DC-5 — at 110 V Rated value — at 24 V Rated value — at 24 V Rated value • at DC-3 • at DC-3 — at 24 V Rated value — at 25 V Rated value — at 26 V Rated value — at 27 V Rated value — at 28 V Rated value — at 29 V Rated value • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-3 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-4 at 400 V Rated value — at 690 V Rat	— at 400 V at ambient temperature 40 °C	Α	215
Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value — at 590 V Rated value — at 690 V Rated value A 160 Operating current with 1 current path • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-5 at AC-7 at 400 V Rated value • at AC-8 at 400 V Rated value • at AC-9 at 400 V Rated value • at AC-1 at 400 V Ra			
	— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$	Α	215
Rated value • at AC-3 — at 400 V Rated value — at 690 V Rated value A • at AC-4 at 400 V Rated value A • at AC-4 at 400 V Rated value A • at DC-1 — at 24 V Rated value — at 110 V Rated value A • at DC-1 — at 24 V Rated value A • at DC-3 — at 24 V Rated value A • at 160 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A • at 10 C-3 — at 110 V Rated value A • at DC-3 — at 110 V Rated value A • at EC-3 — at 110 V Rated value A • at EC-3 — at 110 V Rated value A • at EC-3 • at DC-1 — at 24 V Rated value A • at 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A • at EC-3 • at 110 V Rated value A • at EC-3 • at 220 V Rated value A • at EC-3 • at 220 V Rated value A • at EC-3 • at			
• at AC-3 — at 400 V Rated value — at 580 V Rated value A 170 • at AC-4 at 400 V Rated value A 160 Operating current with 1 current path • at DC-1 — at 24 V Rated value — at 110 V Rated value A 18 • at DC-3 — at 24 V Rated value A 18 • at DC-3 — at 24 V Rated value A 18 • at DC-3 — at 24 V Rated value A 2.5 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 - at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-1 — at 230 V at 60 °C Rated value A 160 Operating power • at AC-1 — at 230 V at 60 °C Rated value A 210 KW 70 — at 690 V Rated value A 160 A 170 A 180 A 160 A 16		Α	185
- at 400 V Rated value			
- at 990 ∨ Rated value		•	405
• at AC-4 at 400 V Rated value Operating current with 1 current path • at DC-1 — at 24 V Rated value — at 110 V Rated value A 18 • at DC-3 at 20-5 — at 24 V Rated value — at 110 V Rated value A 2.5 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value — at 110 V Rated value A 160 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value — at 110 V Rated value A 160 • at DC-3 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-3 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-4 — at 230 V at 60 °C Rated value A 160 Operating power • at AC-1 — at 230 V at 60 °C Rated value A 210 KW 210 — at 690 V Rated value KW 210 — at 690 V Rated value A 1600 A 1600 Operating power • at AC-1 — at 230 V at 60 °C Rated value A 210 — at 690 V Rated value A 210 KW 210			
Operating current with 1 current path ■ at DC-1 — at 24 V Rated value — at 110 V Rated value — at 24 V Rated value — at 24 V Rated value — at 24 V Rated value — at 110 V Rated value — at 110 V Rated value — at 110 V Rated value — at 24 V Rated value — at 110 V Rated value — at 24 V Rated value — at 110 V Rated value — at 24 V Rated value — at 24 V Rated value — at 24 V Rated value — at 110 V Rated value — at 24 V Rated value — at 30 V Rated value — at 30 V Rated value — at 30 V Rated value — at 24 V Rated value — at 25 V Rated value — at 25 V Rated value — at 260 V Rated value — at 27 V Rated value — at 280			
• at DC-1 — at 24 V Rated value — at 110 V Rated value A 18 • at DC-3 at DC-5 — at 24 V Rated value A 160 — at 110 V Rated value A 2.5 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value A 160 Operating power • at AC-1 — at 230 V at 60 °C Rated value A 160 Operating power • at AC-1 — at 230 V at 60 °C Rated value A 210 — at 690 V Rated value A 210		Α	160
- at 24 V Rated value			
— at 110 V Rated value			100
• at DC-3 at DC-5 — at 24 V Rated value A 2.5 Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value value A 160 Operating power • at AC-4 at 400 V Rated value A 160 Operating power • at AC-1 — at 230 V at 60 °C Rated value A W 70 — at 690 V Rated value A W 210 - at 690 V Rated value A W 210			
- at 24 V Rated value		Α	18
— at 110 V Rated value A 2.5 Operating current with 2 current paths in series	• at DC-3 at DC-5		
Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 — at 160 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value kW 121 • at AC-2 at 400 V Rated value kW 104 • at AC-4 at 400 V Rated value W 90 000 Operating power • at AC-1 — at 230 V at 60 °C Rated value kW 70 — at 690 V Rated value kW 210 — at 690 V Rated value kW 210	— at 24 V Rated value		
• at DC-1 — at 24 V Rated value — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-1 — at 230 V at 60 °C Rated value KW 70 — at 690 V Rated value kW 210 KW 210	— at 110 V Rated value	Α	2.5
at 24 V Rated value at 110 V Rated value at 110 V Rated value at 110 V Rated value at 24 V Rated value at 24 V Rated value at 24 V Rated value Operating current with 3 current paths in series • at DC-1 at 24 V Rated value at 110 V Rated value at 24 V Rated value at 25 V Rated value at 26 V Rated value at 27 V Rated value at 28 V Rated value at 280 V at 60 °C Rated value at 690 V Rated value at 690 V Rated value kW 210			
— at 110 V Rated value • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value — at 690 V Rated value • kW 210 — at 690 V Rated value — kW 210	• at DC-1		
• at DC-3 at DC-5 — at 110 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value A 160 • at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value A 160 Operating power • at AC-2 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-4 at 400 V Rated value • at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value kW 210 — at 690 V Rated value kW 210 — at 690 V Rated value kW 210	— at 24 V Rated value	Α	160
- at 110 V Rated value	— at 110 V Rated value	Α	160
— at 24 V Rated value Operating current with 3 current paths in series ● at DC-1 — at 24 V Rated value — at 110 V Rated value A 160 ● at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power ● at AC-1 at 400 V Rated value ■ at AC-2 at 400 V Rated value ■ at AC-4 at 400 V Rated value ■ at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value KW 210 KW 210 KW 210	• at DC-3 at DC-5		
Operating current with 3 current paths in series ● at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 ● at DC-3 at DC-5 — at 110 V Rated value A 160 — at 24 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value kW 121 • at AC-2 at 400 V Rated value kW 104 • at AC-4 at 400 V Rated value W 90 000 Operating power • at AC-1 — at 230 V at 60 °C Rated value kW 70 — at 690 V at 60 °C Rated value kW 210 — at 690 V Rated value kW 210	— at 110 V Rated value	Α	160
● at DC-1 — at 24 V Rated value A 160 — at 110 V Rated value A 160 ● at DC-3 at DC-5 — at 110 V Rated value A 160 Operating power ● at AC-1 at 400 V Rated value B at AC-2 at 400 V Rated value W 90 000 Operating power ● at AC-1 — at 230 V at 60 °C Rated value A 160 W 210 EWW 210 EWW 210 EWW 210	— at 24 V Rated value	Α	160
- at 24 V Rated value A 160 - at 110 V Rated value A 160 • at DC-3 at DC-5 - at 110 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value kW 121 • at AC-4 at 400 V Rated value W 90 000 Operating power • at AC-1 - at 230 V at 60 °C Rated value kW 210 - at 690 V Rated value kW 210 - at 690 V Rated value kW 210	Operating current with 3 current paths in series		
 — at 110 V Rated value ● at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value A 160 Operating power ● at AC-1 at 400 V Rated value ■ at AC-2 at 400 V Rated value ■ at AC-4 at 400 V Rated value ■ at AC-4 at 400 V Rated value W 90 000 Operating power ■ at AC-1 — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V Rated value 	• at DC-1		
at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value A 160 Operating power at AC-1 at 400 V Rated value at AC-2 at 400 V Rated value at AC-4 at 400 V Rated value at AC-4 at 400 V Rated value at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value kW 210 — at 690 V Rated value kW 210	— at 24 V Rated value	Α	160
— at 110 V Rated value A 160 — at 24 V Rated value A 160 Operating power • at AC-1 at 400 V Rated value kW 121 • at AC-2 at 400 V Rated value kW 104 • at AC-4 at 400 V Rated value W 90 000 Operating power • at AC-1 — at 230 V at 60 °C Rated value kW 70 — at 690 V at 60 °C Rated value kW 210 — at 690 V Rated value kW 210	— at 110 V Rated value	Α	160
— at 24 V Rated value Operating power ■ at AC-1 at 400 V Rated value ■ at AC-2 at 400 V Rated value ■ at AC-4 at 400 V Rated value ■ at AC-4 at 400 V Rated value W 90 000 Operating power ■ at AC-1 — at 230 V at 60 °C Rated value — at 690 V Rated value KW 210 kW 210	• at DC-3 at DC-5		
Operating power • at AC-1 at 400 V Rated value	— at 110 V Rated value	Α	160
 at AC-1 at 400 V Rated value at AC-2 at 400 V Rated value at AC-4 at 400 V Rated value W 90 000 Operating power at AC-1 at 230 V at 60 °C Rated value at 690 V at 60 °C Rated value at 690 V Rated value at 690 V Rated value kW 210 at 690 V Rated value kW 210 	— at 24 V Rated value	Α	160
 at AC-2 at 400 V Rated value at AC-4 at 400 V Rated value W 90 000 Operating power at AC-1 at 230 V at 60 °C Rated value at 690 V at 60 °C Rated value at 690 V Rated value at 690 V Rated value 	Operating power		
■ at AC-4 at 400 V Rated value W 90 000 Operating power ■ at AC-1 — at 230 V at 60 °C Rated value	• at AC-1 at 400 V Rated value	kW	121
Operating power • at AC-1 — at 230 V at 60 °C Rated value kW 70 — at 690 V at 60 °C Rated value kW 210 — at 690 V Rated value kW 210	• at AC-2 at 400 V Rated value	kW	104
• at AC-1 — at 230 V at 60 °C Rated value	• at AC-4 at 400 V Rated value	W	90 000
 — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value — at 690 V Rated value kW 210 — at 690 V Rated value kW 210 	Operating power		
 — at 690 V at 60 °C Rated value — at 690 V Rated value kW 210 kW 210 	• at AC-1		
— at 690 V Rated value kW 210	— at 230 V at 60 °C Rated value	kW	70
	— at 690 V at 60 °C Rated value	kW	210
• at AC-3	— at 690 V Rated value	kW	210
	• at AC-3		

— at 230 V Rated value	kW	61
— at 400 V Rated value	kW	104
— at 500 V Rated value	kW	132
— at 690 V Rated value	kW	167
Operating power for ≥ 200000 operating cycles at AC-4		
• at 400 V Rated value	kW	45
• at 690 V Rated value	kW	65
Operating frequency		
• at AC-3 maximum	1/h	750

Control circuit/ Control:			
Type of voltage of the control supply voltage		AC/DC	
Control supply voltage with AC			
● at 50 Hz Rated value	V	96 127	
● at 60 Hz Rated value	V	96 127	
Control supply voltage for DC			
Rated value	V	96 127	
Rated value	Hz	40	
Control supply voltage frequency 2 Rated value	Hz	60	
Operating range factor control supply voltage rated			
value of the magnet coil with AC			
● at 50 Hz		0.8 1.1	
● at 60 Hz		0.8 1.1	
Operating range factor control supply voltage rated		0.8 1.1	
value of the magnet coil for DC			
Design of the surge suppressor		with varistor	
Apparent pick-up power of the magnet coil with AC	V·A	280	
Apparent holding power of the magnet coil with AC	V·A	4.4	
Closing power of the magnet coil for DC	W	320	
Holding power of the magnet coil for DC	W	2.8	
Inductive power factor			
with closing power of the coil		0.8	
with the holding power of the coil		0.4	

Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Number of NO contacts		
 for auxiliary contacts 		
— instantaneous contact		2
Operating current at AC-15		
• at 230 V Rated value	Α	6

at 400 V Rated value	Α	3		
Operating current	, ,			
• at DC-12 at 220 V Rated value	Α	1		
• at DC-12 at 220 V Rated value	Α	0.3		
Operating current		0.0		
• at DC-12				
	Α	6		
— at 60 V Rated value				
— at 110 V Rated value	Α	3		
• at DC-13		40		
— at 24 V Rated value	A	10		
— at 60 V Rated value	Α	2		
— at 110 V Rated value	Α	1		
UL/CSA ratings:				
Contact rating of the auxiliary contacts acc. to UL		A600 / Q600		
Short-circuit:				
Design of the fuse link				
for short-circuit protection of the main circuit				
with type of assignment 1 required		fuse gL/gG: 355 A		
with type of assignment 2 required		fuse gL/gG: 315 A		
for short-circuit protection of the auxiliary switch		fuse gL/gG: 10 A		
required				
Installation/ mounting/ dimensions:				
Mounting type		screw fixing		
Side-by-side mounting		Yes		
Height	mm	172		
Width	mm	120		
Depth	mm	170		
Required spacing				
• for grounded parts				
— at the side	mm	10		
Connections/ Terminals:				
Type of electrical connection				
• for main current circuit		Cage Clamp terminals		
for auxiliary and control current circuit		Cage Clamp terminals		
Type of connectable conductor cross-section				
• for AWG conductors for main contacts		4 250 kcmil		
• for auxiliary contacts				
— solid		2x (0.25 2.5 mm²)		
		2x (0.25 2.5 mm²) 2x (0.25 1.5 mm²)		
— finely stranded with core end processing				
 finely stranded without core end processing 		2x (0.25 2.5 mm²)		

• for AWG conductors for auxiliary contacts 2x (24 ... 14)

Mechanical data:
Size of contactor S6

Ambient conditions:

Installation altitude at height above sea level m 2 000 maximum

Ambient temperature

• during operation °C -25 ... +60
• during storage °C -55 ... +80

Certificates/ approvals:

General Product Approval	Functional	Declaration of	Test
	Safety/Safety	Conformity	Certificates
	of Machinery		







Type Examination



Special Test Certificate

Shipping Approval







GL



other

Environmental Confirmations

Confirmation

other

other

Further information

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

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

Industry Mall (Online ordering system)

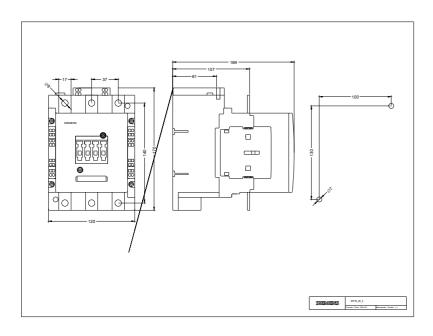
http://www.siemens.com/industrymall

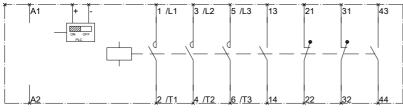
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10562NF36

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RT10562NF36/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10562NF36&lang=en





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