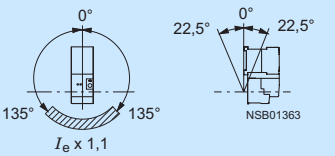
General data

Technical specifications

		3RE1. 10 3RE19 13	3RE1. 20 3RE19 23	3RE1. 30 3RE19 33
General data				
Standards • IEC 60947-1, EN 60947-1 (VDE 0660 Part 100) • IEC 60947-5, EN 60947-5 (VDE 0660 Part 200) • IEC 60947-2, EN 60947-2 (VDE 0660 Part 101)		 Yes Yes Yes		
Size		S00	S0	S0
Max. rated current $I_{n\ max}$ = (Max. rated operational current I_e)	A	12	25	50
Rated insulation voltage U_i (degree of pollution 3)	V	400		
Rated impulse withstand voltage U_{imp}	kV	4		
Ambient temperature • Operation • Storage	 °C °C	 -20 ... +35 (current reduction is necessary above +35 °C) -55 ... +80		
Degree of protection according to IEC 60947-1		IP65		
Touch protection according to EN 50274 (VDE 0660 Part 514)		Finger-safe		
Installation altitude	m	Up to 2000 above sea level; above this, please enquire		
Permissible rated current I_n • Overload relay for ambient temperature: +35 °C • Overload relay for ambient temperature: +45 °C	 % %	 100 87		
Mounting position		For installation in the hatched area, a setting correction of 10 % must be implemented.  Contactor + overload relay		
Conductor cross-sections		1)		
Short-circuit protection				
Main circuit		2)		
Auxiliary circuit		1)		

1) See Chapter 5, Protective Devices –> Overload Relays –> 3RU1 Thermal Overload Relays.

2) When using the 3RU11 thermal overload release, see "Selection of Overload Relays and Short-Circuit Protection", page 6/141 and 6/142

Selection of overload relays and short-circuit protection

With short-circuit currents up to 50 kA at 400 V, 50/60 Hz
Permissible short-circuit protection for enclosed motor starters comprising contactor/contactor assembly and overload relay

Size S00

Setting range	3RU11 thermal overload relay	**Fuses for type of coordination "1"[1)]** 5.5 kW = 3RE1. 10-8XC17 (3RT10 17 contactor) $I_{e\ max}$ = 12 A (at 400 V, 50/60 Hz)		**Fuses for type of coordination "2"[1)]** 5.5 kW = 3RE1. 10-8XC17 (3RT10 17 contactor) $I_{e\ max}$ = 12 A (at 400 V, 50/60 Hz)		**Motor starter protectors for type of coordination "2"[1)]** at I_q = 50 kA / 400 V, 50/60 Hz
		gL/gG	BS88	gL/gG	BS88	
A		A	A	A	A	
0.11 ... 0.16	3RU11 16-0AB0	25	25	0.5	--	--
0.14 ... 0.2	3RU11 16-0BB0	25	25	1	--	3RV13 21-0BC10
0.18 ... 0.25	3RU11 16-0CB0	25	25	1	--	3RV13 21-0CC10
0.22 ... 0.32	3RU11 16-0DB0	25	25	1.6	2	3RV13 21-0DC10
0.28 ... 0.4	3RU11 16-0EB0	25	25	2	2	3RV13 21-0EC10
0.35 ... 0.5	3RU11 16-0FB0	25	25	2	2	3RV13 21-0FC10
0.45 ... 0.63	3RU11 16-0GB0	25	25	2	4	3RV13 21-0GC10
0.55 ... 0.8	3RU11 16-0HB0	25	25	4	4	3RV13 21-0HC10
0.7 ... 1	3RU11 16-0JB0	25	25	4	6	3RV13 21-0JC10
0.9 ... 1.25	3RU11 16-0KB0	25	25	4	6	3RV13 21-0KC10
1.1 ... 1.6	3RU11 16-1AB0	35	35	6	10	3RV13 21-1AC10
1.4 ... 2	3RU11 16-1BB0	35	35	6	10	3RV13 21-1BC10
1.8 ... 2.5	3RU11 16-1CB0	35	35	10	10	--
2.2 ... 3.2	3RU11 16-1DB0	35	35	10	16	--
2.8 ... 4	3RU11 16-1EB0	35	35	16	16	--
3.5 ... 5	3RU11 16-1FB0	35	35	20	20	--
4.5 ... 6.3	3RU11 16-1GB0	35	35	20	20	--
5.5 ... 8	3RU11 16-1HB0	35	35	20	20	--
7 ... 10	3RU11 16-1JB0	35	35	20	20	--
9 ... 12	3RU11 16-1KB0	35	35	--	--	--

Size S0

Setting range	3RU11 thermal overload relay	**Fuses for type of coordination "1"[1)]** 7.5 kW = 3RE1. 20-8XC25 (3RT10 25 contactor) $I_{e\ max}$ = 17 A (at 400 V, 50/60 Hz)		11 kW = 3RE1. 20-8XC26 (3RT10 26 contactor) $I_{e\ max}$ = 25 A		**Fuses for type of coordination "2"[1)]** 7.5 kW = 3RE1. 20-8XC25 (3RT10 25 contactor) $I_{e\ max}$ = 17 A (at 400 V, 50/60 Hz)		11 kW = 3RE1. 20-8XC26 (3RT10 26 contactor) $I_{e\ max}$ = 25 A		**Motor starter protectors for type of coordination "2"[1)]** at I_q = 50 kA / 400 V, 50/60 Hz
		gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	
A		A	A	A	A	A	A	A	A	
1.8 ... 2.5	3RU11 26-1CB0	63	63	63	63	10	10	10	10	3RV13 21-1CC10
2.2 ... 3.2	3RU11 26-1DB0	63	63	63	63	10	16	10	16	3RV13 21-1DC10
2.8 ... 4	3RU11 26-1EB0	63	63	63	63	16	16	16	16	3RV13 21-1EC10
3.5 ... 5	3RU11 26-1FB0	63	63	63	63	20	20	20	20	3RV13 21-1FC10
4.5 ... 6.3	3RU11 26-1GB0	63	63	63	63	20	25	20	25	3RV13 21-1GC10
5.5 ... 8	3RU11 26-1HB0	63	63	63	63	25	32	25	32	3RV13 21-1HC10
7 ... 10	3RU11 26-1JB0	63	63	63	63	25	32	32	35	3RV13 21-1JC10
9 ... 12.5	3RU11 26-1KB0	63	63	63	63	25	32	35	35	3RV13 21-1KC10
11 ... 16	3RU11 26-4AB0	63	63	63	63	25	32	35	35	3RV13 21-4AC10
14 ... 20	3RU11 26-4BB0	63	63	63	63	25	32	35	35	3RV13 21-4BC10
17 ... 22	3RU11 26-4CB0	--	--	100	100	--	--	35	35	3RV13 21-4CC10
20 ... 25	3RU11 26-4DB0	--	--	100	100	--	--	35	35	--

[1)] Coordination and short-circuit equipment according to EN 60947-4-1:
Type of coordination "1": In the short-circuit case, the contactor or starter must not put equipment or personnel at risk. They do not have to be suitable for further operation (without repair and the replacement of parts).

Type of coordination "2": In the short-circuit case, the contactor or starter must not put equipment or personnel at risk. This must be capable of further operation. There is a risk of contact welding.

General data

Size S2

Setting range	3RU11 thermal overload relay	Fuses for type of coordination "1"[1] 15 kW = 3RT10 34 $I_{e\ max}$ = 32 A (at 400 V, 50/60 Hz)		18.5 kW = 3RT10 35 $I_{e\ max}$ = 40 A (at 400 V, 50/60 Hz)		22 kW = 3RT10 36 $I_{e\ max}$ = 50 A (at 400 V, 50/60 Hz)		Fuses for type of coordination "2"[1] 15 kW = 3RT10 34 $I_{e\ max}$ = 32 A (at 400 V, 50/60 Hz)		18.5 kW = 3RT10 35 $I_{e\ max}$ = 40 A (at 400 V, 50/60 Hz)		22 kW = 3RT10 36 $I_{e\ max}$ = 50 A (at 400 V, 50/60 Hz)		Motor starter protectors for type of coordination "2"[1] at I_q = 50 kA / 400 V, 50/60 Hz
		gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	gL/gG	BS88	
A		A	A	A	A	A	A	A	A	A	A	A	A	
5.5 ... 8	3RU11 36-1HB0	125	125	125	125	125	125	25	25	25	25	25	25	--
7 ... 10	3RU11 36-1JB0	125	125	125	125	125	125	32	32	32	32	32	32	--
9 ... 12.5	3RU11 36-1KB0	125	125	125	125	125	125	35	35	35	35	35	35	--
11 ... 16	3RU11 36-4AB0	125	125	125	125	125	125	40	40	40	40	40	40	--
14 ... 20	3RU11 36-4BB0	125	125	125	125	125	125	50	50	50	50	50	50	--
18 ... 25	3RU11 36-4DB0	125	125	125	125	125	125	63	63	63	63	63	63	3RV13 31-4DC10
22 ... 32	3RU11 36-4EB0	125	125	125	125	125	125	63	63	63	63	80	80	3RV13 31-4EC10
28 ... 40	3RU11 36-4FB0	125	125	125	125	125	125	63	63	63	63	80	80	3RV13 31-4FC10
36 ... 45	3RU11 36-4GB0	--	--	125	125	125	125	--	--	63	80	80	80	3RV13 31-4GC10
40 ... 50	3RU11 36-4HB0	--	--	--	--	160	160	--	--	--	--	80	80	3RV13 31-4HC10

[1] Coordination and short-circuit equipment according to EN 60947-4-1:
Type of coordination "1": In the short-circuit case, the contactor or starter must not put equipment or personnel at risk. They do not have to be suitable for further operation (without repair and the replacement of parts).

Type of coordination "2": In the short-circuit case, the contactor or starter must not put equipment or personnel at risk. This must be capable of further operation. There is a risk of contact welding.