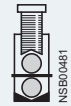
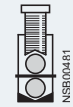
Technical specifications

Type			3RA6.	
General data				
Max. rated operational current				
• Infeed with screw connection 50/70 mm²		A	100	
• Infeed with screw connection 25/35 mm²		A	63	
• Infeed with spring-type connection 25/35 mm²		A	80	
• Expansion plugs		A	63	
Permissible ambient temperature				
• During operation		°C	-20 ... +60 (over +40 current reduction is required)	
- Permissible rated current at control cabinet inside temperature: +40 °C		%	100	
+60 °C		%	80	
• During storage/transport		°C	-55 ... +80	
Relative air humidity		%	10 ... 90	
Installation altitude		m	Up to 2000 above sea level without restriction	
Rated operational voltage U_e		V	AC 690	
Rated frequency		Hz	50/60	
Shock resistance			a = 60 m/s² = 6g with 10 ms; for every 3 shocks in all axes	
Vibratory load			f =1 ... 6 Hz; d =15 mm 10 cycles f =150 Hz; a = 2 g	
Degree of protection	according to IEC 60947-1		IP20 (IP 00 terminal compartment)	
Touch protection	according to EN 50274		Finger-safe	
Degree of pollution			3	
Short-circuit protection for infeed with screw connection (25/35 mm²) and infeed with screw connection (50/70 mm²)				Recommendation for upstream short-circuit protection device
	$I_{d,max}$	kA	< 21	3RV1041-4MA10
	I^2t	kA²s	530	LV HRC gL/gG 3NA3, 315 A
Short-circuit protection for infeed with spring-type connection				Recommendation for upstream short-circuit protection device
• Conductor cross-section 4 mm²	$I_{d,max}$	kA	< 9.5	3RV1021-4DA10
	I^2t	kA²s	85	
• Conductor cross-section 6 mm²	$I_{d,max}$	kA	< 12.5	3RV1031-4EA10
	I^2t	kA²s	140	
• Conductor cross-section 10 mm²	$I_{d,max}$	kA	< 15	3RV1031-4HA10
	I^2t	kA²s	180	
• Conductor cross-section 16 / 25 mm²	$I_{d,max}$	kA	< 19	3RV1041-4JA10
	I^2t	kA²s	440	
Short-circuit protection for terminal blocks				
• Conductor cross-section 1.5 mm²	$I_{d,max}$	kA	7.5	
• Conductor cross-section 2.5 mm²	$I_{d,max}$	kA	9.5	
• Conductor cross-section 4 mm²	$I_{d,max}$	kA	9.5	
• Conductor cross-section 6 mm²	$I_{d,max}$	kA	12.5	

Type		3RV19.
Connection type		**Spring-loaded connection**
Conductor cross-sections of terminal blocks		
Order No.		**3RV19 17-5D**
Conductor cross-sections		
• Solid	mm²	1.5 ... 6
• Finely stranded with end sleeve	mm²	1.5 ... 4
• Finely stranded without end sleeve	mm²	1.5 ... 6
• AWG cables, solid or stranded	AWG	15 ... 10

Infeed Systems

Infeed systems for 3RA6

Type		**3RA6.**			
Connection type		**Screw connection**			
Conductor cross-sections of infeed with screw connection 25/35 mm² (L1, L2, L3)[1] and PE infeed 25/35 mm²					
Order No.		**3RA68 12-8AB, 3RA68 12-8AC, 3RA68 60-6AB**			
Tools	Pozidriv	Size 2			
Prescribed tightening torque	Nm	3 ... 4.5			
		 NSB00479	 NSB00480	 NSB00481	
Conductor cross-sections					
• Solid	mm²	2.6 ... 16	2.6 ... 16	max. 2 x 16	
• Stranded	mm²	2.5 ... 35	2.5 ... 35	max. 2 x 25	
• Finely stranded with end sleeve	mm²	2.5 ... 25	2.5 ... 25	max. 2 x 16	
• Finely stranded without end sleeve	mm²	2.5 ... 25	2.5 ... 25	max. 2 x 16	
• AWG cables	AWG	12 ... 2	12 ... 2	max. 2 x (18 ... 2)	
Connection type		**Screw connection**			
Conductor cross-sections of infeed with screw connection 50/70 mm² (L1, L2, L3)[1]					
Order No.		**3RA68 13-8AB, 3RA68 13-8AC**			
Tools	SW	4			
Prescribed tightening torque	Nm	6 ... 8			
		 NSB00479	 NSB00480	 NSB00481	
Conductor cross-sections					
• Solid	mm²	2.5 ... 16	2.5 ... 16	Max. 2 x 16	
• Stranded	mm²	4 ... 70	10 ... 70	Max. 2 x 50	
• Finely stranded with end sleeve	mm²	2.5 ... 35	2.5 ... 50	Max. 2 x 35	
• Finely stranded without end sleeve	mm²	4 ... 50	10 ... 50	Max. 2 x 35	
• AWG cables	AWG	10 ... 2/0	10 ... 2/0	Max. 2 x (10 ... 1/0)	
Connection type		**Spring-loaded connection**			
Conductor cross-sections of infeed with spring-type connection 25/35 mm² (L1, L2, L3)[1] and PE infeed 25/35 mm²					
Order No.		**3RA68 30-5AC, 3RA68 60-5AC**			
Tools	8WA2 806 mm	5.5 x 0.8			
Conductor cross-sections					
• Solid	mm²	4 ... 16			
• Stranded	mm²	4 ... 35			
• Finely stranded with end sleeve	mm²	4 ... 25			
• Finely stranded without end sleeve	mm²	6 ... 25			
• AWG cables	AWG	10 ... 3			

Connection type		**Screw connection**		**Spring-loaded connection**	
Conductor cross-sections of infeed with screw connection 25/35 mm² (T1, T2, T3)[2], infeed with screw connection 50/70 mm² (T1, T2, T3)[2], 2-socket and 3-socket expansion modules (T1,T2,T3)[2] and PE pick-off 6/10 mm²					
Order No.		**3RA68 12-8AB, 3RA68 13-8AB, 3RA68 22-0AB, 3RA68 23-0AB, 3RA68 70-4AB**		**3RA68 12-8AC, 3RA68 13-8AC, 3RA68 22-0AC, 3RA68 23-0AC, 3RA68 70-3AC**	
Tools		Pozidriv size 2		(3.5 x 0.5) mm, 8WA2 803	
Prescribed tightening torque	Nm	2 ... 2.5		--	
Maximum rated current	A	**12**	**32**	**12**	**32**
Conductor cross-sections					
• Solid	mm²	2 x (1 ... 2.5)	2 x (2.5 ... 6)	2 x (1.5 ... 6)	2 x (2.5 ... 6)
	mm²	2 x (2.5 ... 6)			
	mm²	Max. 1 x 10	Max. 1 x 10	Max. 1 x 10	Max. 1 x 10
• Finely stranded with end sleeve	mm²	--	--	2 x (1.5 ... 6)	2 x (2.5 ... 6)
• Finely stranded without end sleeve	mm²	2 x (1 ... 2.5)	2 x (2.5 ... 6)	2 x (1.5 ... 6)	2 x (2.5 ... 6)
	mm²	2 x (2.5 ... 6)			
• AWG cables	AWG	2 x (16 ... 14)	2 x (14 ... 10)	2 x (16 ... 10)	2 x (14 ... 10)
	AWG	2 x (14 ... 10)			
	AWG	1 x 8	1 x 8	1 x 8	1 x 8

[1] L1, L2, L3 main conductors on input side.

[2] T1, T2, T3 main conductors on output side.