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Things to Know About the Catalog
Product Overview

SIRIUS Control

IEC Power Control

MSPs – 3RV10, 3RV20, 3RV21 Motor Starter Protectors
3RV27, 3RV28 Circuit Breakers
3RA19/29 & 3RV19/29 Accessories

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Contactors – 3RT, 3TF, 3TC Contactors
3RA23 Reversing Contactors, 3RA24 Wye-Delta Starters
3RH Control Relays; 3RA19/28/29 & 3RT19/29 Accessories

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Overload Relays – 3RU Thermal Overload Relays
3RB Solid State Overload Relays
3UF SIMOCODE pro Intelligent Motor Protection

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Starters – 3RA2 Combination Starters
3RA6 Compact Combination Starters
3RE4 Enclosed HP Rated Starters

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Power Distribution Systems –
8US Fast Bus Busbar Power Distribution System

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SIRIUS Hybrid

Solid State Control

Hybrid Motor Starters – 3RM1 Motor Starters
ET 200SP & ET 200pro Motor Starters
M200D Motor Starters

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Soft Starters – 3RW30, 3RW40, 3RW50, 3RW52 & 3RW55 Soft Starters
Class 73 & 74 Enclosed Soft Starters

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Drives – SINAMICS G120X Drives, 6SL32

Solid-State Relays & Contactors –
3RF20 45mm Relays; 3RF21 22.5mm Relays; 3RF22 3-Phase Relays;
3RF23 Contactors; 3RF24 & 34 3-Phase Contactors; 3RF29 Modules

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General Purpose Control

Manual Starters & Switches; NEMA Contactors & Starters;
Overload relays; Duplex Controllers; Pump Panels; Reduced Voltage
Starters; DP Contactors; Lighting Contactors; Transformers

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SIRIUS Command & SIRIUS Monitor

Control Circuit Components

Pilot Devices – 3SB2, 3SU1, 52 Pushbuttons, Selector Switches,
Pilot Lights & Stations; 8WD Signal Columns

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Function Relays – 3RN Thermistor Motor Protection; 3RP & 7PV Timers;
3RS Temperature Monitoring Relays & Converters; 3RQ Coupling Relays;
3UG Monitoring Relays; 3TG Power Relays; 3TX71 & LZS Plug-in Relays

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Terminal blocks –
8WA / 8WH Terminal Blocks
8WA Special Label Marking Instructions

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Limit Switches – 3SE5 (IEC) & 3SE03 (NEMA)
Safety – 3SE5 Hinge & Interlock, 3SE6 Magnet, and 3SE7
Cable-operated Switches; 3SK & 3TK28 Safety Relays; 3RK3 MSS

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AS-Interface – 6GK7 Masters; 3RK Slaves, I/O Modules, & Safety
Modules; 3SF2 Cable Pull, 3SF1 Limit & Interlock Switches
IO-Link – 6ES7 Masters; 3RK Input Modules

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Programmable Relays – LOGO! 6ED Modular Relays
Power Supplies – SITOP 6EP Power Supplies
Ethernet Switches – 6GK Unmanaged Ethernet Switches

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Control Circuit Protection

5SJ4 Miniature Circuit Breakers to UL 489
5SP & 5SY Supplementary Protectors to UL 1077
3NW7 Fuse Holders to UL 512

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Circuit Breakers

120/240 V Lug In/Lug Out and DIN Rail Breakers
15 to 3200A Molded Case Circuit Breakers

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Switches

Safety Switches – VBII
Enclosed Switches – VBII & 3LD2
Disconnect Switches – 3LD, CFS, CNFS, MCS & VBII

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Appendix - General Information

UL and CSA File & Guide Numbers; On-line References;
General Information; Spring-Loaded Terminal Overview;
ICE Quick Reference List

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Trip Settings for 3VA61

ETU320-LI, ETU330-LIG, ETU350-LSI

Continuous Amperage	LI, LIG, LSI			LSI		LIG	LI, LIG, LSI 4P only
I_n (Amp)	I_r (Amp) (L)	t_{td} (sec) (L)	I_i (Amp) (I)①	$I_{sd} = xI_r$ (Amp) (S)	t_{sd} (sec) (S)	I_g (Amp) (G)	$I_N = xI_r$ (Amp)
40	15 - 40	0.5 - 17	60-480	1.5 - 10	0.08 - 0.4	15 - 40	1 / OFF
100	40 - 100	0.5 - 17	150-1200	1.5 - 10		20 - 100	0.5 - 1 / OFF
150	60 - 150	0.5 - 17	225-1500	1.5 - 10		30 - 150	0.5 - 1 / OFF

① I_i for ETU350 is fixed at the maximum level shown in table.

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

Continuous Amperage	LI, LIG, LSI, LSIG, LSI(G)			LSI, LSIG, LSI(G)		LIG, LSIG, LSI(G)		LSI 3P with External CT	LI, LIG, LSI, LSIG, LSI(G) 4P only
I_n (Amp)	I_r (Amp) (L)②	t_{td} (sec) (L)	I_i (Amp) (I)	I_{sd} (Amp) (S)	t_{sd} (sec) (S)	I_g (Amp) (G)	t_g (G)	$I_N = xI_r$ (Amp)	I_N (Amp)
40	15 - 40	0.5 - 25	60-480	24 - 400	0.05 - 0.5	15 - 40	0.05 - 0.8	15 - 64 / OFF	15 - 64 / OFF
100	40 - 100	0.5 - 25	150-1200	60 - 1000		20 - 100		20 - 160 / OFF	20 - 150 / OFF
150	60 - 150	0.5 - 20	225-1500	90 - 1500		30 - 150		30 - 240 / OFF	30 - 150 / OFF

② Adjustable in steps of 1A.

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://digitalcontentcenter.compas.siemens-info.com/SIE_IM_3VA6_Systems_Manual.pdf

Internal accessories		3VA6 150/250 A 3-pole														3VA6 150/250 A 4-pole													
Optional equipment																													
		Slot No.:																											
Auxiliary switch		Type																											
Auxiliary switch	AUX_HQ	x	x	x	x					x	x	x	x		x	x	x	x					x	x	x	x			
	AUX_HQ_el	x	x	x	x					x	x	x	x		x	x	x	x				x	x	x	x				
	AUX_HP	x	x	x	x					x	x	x	x		x	x	x	x				x	x	x	x				
Leading changeover switch	LCS_HQ																												
	LCS_HQ_el																												
	LCS_HP																												
Alarm switch		Type																											
Trip alarm switch	TAS_HQ				x	x				x	x							x	x				x	x					
	TAS_HQ_el				x	x				x	x							x	x				x	x					
	TAS_HP				x																		x						
Electrical alarm switch	EAS_HQ																										x		
	EAS_HQ_el																									x			
Auxiliary release		Type																											
Shunt trip flexible	STF				x										x										x				
Shunt trip left	STL				x													x											
Undervoltage release	UVR				x													x											
Universal release	UNI				x													x											
ETU/communication		Type																											
Communication module	COM060																										x		
Breaker data server																											x		
24 V module																													
Other																													
Cylinder lock (type Ronis)															x												x		

See page 17/49 for internal accessory part numbers.

3VA Molded Case Circuit Breakers

3VA52 250A Thermal-magnetic Trip Circuit Breakers

Technical information

Interrupting Ratings for 3VA52

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)							
		Volts AC (50/60 Hz)					Volts DC		
		240	480Y/277V	480	600Y/347V	600	250	500	600 (3P)
M	MFAS	85	35	35	18	18	50	50	50
H	HFAS	100	65	65	25	25	85	85	85
C	CFAS	200	100	100	35	35	100	100	100

Trip Settings for 3VA52

TM210 - FTFM		
I _n (A)	I _r (A)	I _i (A)
40	40	400
50	50	500
60	60	600
70	70	700
80	80	800
90	90	900
100	100	1000
110	110	1100
125	125	1250
150	150	1500
175	175	1750
200	200	2000
225	225	2250
250	250	2500

TM230 - FTAM								
I _n (A)	I _r (A)	I _i (A)						
70	70	350	420	490	560	630	700	
80	80	400	480	560	640	720	800	
90	90	450	540	630	720	810	900	
100	100	500	600	700	800	900	1000	
110	110	550	660	770	880	990	1100	
125	125	625	750	875	1000	1125	1250	
150	150	750	900	1050	1200	1350	1500	
175	175	875	1050	1225	1400	1575	1750	
200	200	1000	1200	1400	1600	1800	2000	
225	225	1125	1350	1575	1800	2025	2250	
250	250	1250	1500	1750	2000	2250	2500	

TM240 - ATAM									
I _n (A)	I _r (A) 90%	I _r (A) 80%	I _i (A)						
70	63	56	350	420	490	560	630	700	
80	72	64	400	480	560	640	720	800	
100	90	80	500	600	700	800	900	1000	
125	113	100	625	750	875	1000	1125	1250	
150	135	120	750	900	1050	1200	1350	1500	
175	158	140	875	1050	1225	1400	1575	1750	
200	180	160	1000	1200	1400	1600	1800	2000	
250	225	200	1250	1500	1750	2000	2250	2500	

Connectors for 75C Wire for 3VA52

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)	Part Number (kit of 4 lugs)
Steel wrap around (Cu cable only), single cable lugs	AWG 10	3/0	3VA9233-0JA11	3VA9234-0JA11
	AWG 4	350 kcmil	3VA9233-0JA12	3VA9234-0JA12
Aluminum body lug (Cu/Al cable), single cable lugs	AWG 14	1/0	3VA9233-0JB11	3VA9234-0JB11
	AWG 6	350 kcmil	3VA9233-0JB12 ^①	3VA9234-0JB12 ^①
Aluminum body lug (Cu/Al cable) with control wire tap, single cable lugs	AWG 14	1/0	3VA9233-0JG11	3VA9234-0JG11
	AWG 6	350 kcmil	3VA9233-0JG12	3VA9234-0JG12
Aluminum body lug large (Cu/Al cable) single cable lugs with 1 extended terminal cover	AWG 2	350 kcmil	3VA9233-0JJ13	3VA9234-0JJ13
Aluminum body lug large with control wire tap (Cu/Al cable) single cable lugs and 1 extended terminal cover	AWG 2	350 kcmil	3VA9233-0JC13	3VA9234-0JC13
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	AWG 4	300 kcmil	3VA9233-0JJ22	3VA9234-0JJ22
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9233-0JF60	3VA9234-0JF60
Copper body lug (Cu cable only) single cable lugs	AWG 14	1/0	3VA9233-0JD11	3VA9234-0JD11
	AWG 6	350 kcmil	3VA9233-0JD12	3VA9234-0JD12
Copper body lug with control wire tap (Cu cable only) single cable lugs	AWG 14	1/0	3VA9233-0JK11	3VA9234-0JK11
	AWG 6	350 kcmil	3VA9233-0JK12	3VA9234-0JK12

See page 17/49 for internal accessory part numbers.

① Standard lug installed at the factory when breaker ordered with a "6" in the 12th position.

Internal accessories	
Optional equipment	
Slot No.:	
Auxiliary switch	AUX_HQ
	AUX_HQ_el
	AUX_HP
Leading changeover switch	LCS_HQ
	LCS_HQ_el
	LCS_HP
Alarm switch	TAS_HQ
	TAS_HQ_el
	TAS_HP
Auxiliary release	
Shunt trip flexible	STF
	STL
	STL
Undervoltage release	
Universal release	
Other	
Cylinder lock (type Ronis)	

