

Supplying – Protecting – Monitoring – Checking

Electronic mayr® – DC Voltage Modules for Safety brakes

All technical data of the DC voltage modules can be found on our Homepage

Function	Supplying						Protecting
Module	Type 024.000.6 Half-wave rectifier	Type 025.000.6 Bridge rectifier	Type 017._00.2 ROBA®-switch	Type 017.110.2 ROBA®-switch	Type 018.100.2 ROBA®-switch 24V	Type 019._00.2 ROBA®-multiswitch	Type 070.000.6 Spark quenching unit
Overexcitation / Power reduction			X	X	X	X	
DC-side disconnection				X	X		
Mains/input voltage	up to 600 VAC	up to 230 VAC	100 to 500 VAC	100 to 500 VAC	24 VDC	100 to 275 VAC 200 to 500 VAC	Max. 300 VDC
Output voltage/ Overexcitation voltage	up to 270 VDC dependent on the mains voltage VDC = 0.45 x VAC	up to 207 VDC dependent on the mains voltage VDC = 0.9 x VAC	90 to 450 VDC dependent on the mains voltage VDC = 0.9 x VAC	90 to 450 VDC dependent on the mains voltage VDC = 0.9 x VAC	24 VDC	90 VDC (Size 10) 180 VDC (Size 20) constant / independent of the mains voltage	
Nominal voltages			45 to 225 VDC dependent on the mains voltage VDC = 0.45 x VAC	45 to 225 VDC dependent on the mains voltage VDC = 0.45 x VAC	6 VDC 8 VDC 12 VDC 16 VDC	52 VDC (Size 10) 104 VDC (Size 20) constant / independent of the mains voltage	
Switching times			0.05 to 2 s	0.05 to 2 s	0.15 s / 0.45 s / 1 s, 1.5 s / 2.15 s	0.15 s / 0.45 s / 1 s, 1.5 s / 2 s	
Output current	4.0 A	2.5 A	3.0 A (at 250 VAC)	1.5 A	5.0 A	2.0 A (Size 10) 4.5 A (Size 20)	
Characteristics / Application	Standard application Compact construction	Standard application, preferred for noise-damped brakes Compact construction	Short separation time	Short separation time and short connection time	Short separation time and short connection time no wear on contacts	Short separation time Consistently controlled output voltage with variable input voltage	Reduces switch-off voltage and wear on contacts

Monitoring		Monitoring and Supplying			Checking / Controlling and Monitoring	Safe control and monitoring
Type 058.600.2 ROBA®-brake-checker DC	Type 059.500.2 ROBA®-brake-checker AC	Type 028.100.2 ROBA®-brake-checker plus DC	Type 028.600.2 ROBA®-brake-checker plus DC	Type 029.700.2 ROBA®-brake-checker plus AC	Type 068.200.2 ROBA®-torqcontrol DC	Type 021.100.2 ROBA®-SBCplus
		X	X	X	X	X
		X	X		X	X
Max. 50 VDC	Max. 207 VDC ¹⁾ Max. 432 VDC ¹⁾	24 VDC (Size 2) 48 VDC (Size 4)	24 VDC	200 to 480 VAC	24 VDC or 48 VDC	24 VDC or 48 VDC
dependent on the supply	dependet on supply ¹⁾	24 VDC (Size 2) 48 VDC (Size 4)	24 VDC	104 / 52 VDC 207 / 104 VDC 185 / 104 VDC 360 / 185 VDC	24 VDC or 48 VDC	24 VDC or 48 VDC
dependent on the supply	dependet on supply ¹⁾	4 / 6 / 8 / 12 / 16 VDC (Size 2) 8 / 12 / 16 / 24 / 32 VDC (Size 4) constant / independent of the supply voltage	4 / 12 / 16 VDC further voltages available on request	52 VDC 104 VDC 185 VDC	4/6/8/12/16 VDC (24 VDC) 8/12/16/24/32 VDC (48 VDC) constant / independent of the supply voltage	6 VDC 8 VDC 12 VDC 16 VDC 24 VDC 32 VDC
		adapted to brake specifications	adapted to brake specifications	adapted to brake specifications	adapted to brake specifications	0.1 s to 2.5 s
10 A	3.5 A	10.0 A (Size 2) 5.0 A (Size 4)	5.0 A	2.0 A	10.0 A (24 VDC) 5.0 A (48 VDC)	24 VDC/2x5.5 A 48 VDC/2x2.75 A
integrated release and drop-out recognition Brake status display preventative function monitoring	integrated release and drop-out recognition Brake status display preventative function monitoring ¹⁾ Supply with half-wave rectifier, bridge rectifier oqqr ROBA®-switch not via ROBA®-multiswitch	integrated release and drop-out recognition Brake status display short separation time and short connection time no wear on contacts preventative function monitoring	integrated release and drop-out recognition Brake status display short separation time and short connection time no wear on contacts preventative function monitoring	integrated release and drop-out recognition Brake status display short separation time and short connection time preventative function monitoring	Setting of spring force and braking torque Integrated release and drop-out recognition Brake status display Short separation time and short connection time No wear on contacts	Controlling and monitoring up to two ROBA-stop® safety brakes, particularly in applications with requirements on personal protection according to standards on Functional Safety such as for example ISO 13849 and IEC 62061