





Relays with Make Contacts


Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC					286-364	112	286-365	112	286-366	112				
					788-355	79								
					288-364	100								
AC					288-320	106								
					287-475	106								
AC/DC					287-474	106								
					286-376	119								
					789-571	158								
				286-564	112						286-566	112	286-567	112
													789-570	158
					857-1330	52	288-565	100			288-567	100		
					288-564	100								


Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC	286-326	116	286-327	116	286-328	116	286-329	116	286-330	116			286-332	116
AC														
AC/DC														


Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC	286-350	118	286-351	118	286-352	118	286-353	118	286-354	118	286-355	118		
					789-352	154								
					286-552	118					286-555	118	286-556	118
AC														
AC/DC			789-551	154	789-552	154								


Relays with break contacts and make contacts

Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC					286-368	112	286-369	112	286-370	112				
					286-568	112								
AC														
AC/DC					288-568	100								

Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC	286-318	116	286-319	116	286-320	116	286-321	116	286-322	116			286-324	116
					286-906	120								
					286-571	121								
AC					286-520	116							286-570	121
AC/DC														


Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC	286-334	117	286-335	117	286-336	117	286-337	117	286-338	117	286-339	117		
					789-336	155								
					286-536	117							286-540	117
AC														
AC/DC			789-535	155	789-536	155								

Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V	
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 DC	286-342	117	286-343	117	286-344	117	286-345	117	286-346	117	286-347	117		
					286-544	117					286-547	117	286-548	117
AC														
AC/DC														

Nominal voltage	5 V		12 V		24 V		48 V		60 V		115 V		230 V		
	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page	
Safety relays  DC	288-412	109	288-413	109	288-435	108									
	288-422	109	288-423	109											
AC													288-418	109	
													288-428	109	
AC/DC					288-414	109	288-415	109	288-416	109					
					288-424	109	288-425	109	288-426	109					

Overview: Timing Relays, Optocouplers and Special Functions

Timing Relay with Changeover Contact

Nominal voltage 1 changeover contact	Timer Range	On-Delay		Off-Delay		Pulsing		Pulse Lengthening	
		Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
 24 VDC	0.1 s ... 1 s	286-600	122	286-440	124	286-460	125	286-426	123
	1 s ... 10 s	286-602	122	286-442	124	286-462	125	286-427	123
	10 s ... 100 s	286-604	122	286-444	124	286-464	125	286-428	123
230 VAC	0.1 s ... 1 s	286-610	122	286-446	124	286-470	125		
	1 s ... 10 s	286-612	122	286-448	124	286-472	125		
	10 s ... 100 s	286-614	122	286-450	124	286-474	125		
Multirange Timing Relay 24 VAC, 115 VAC, 230 VAC, 24 VDC	0.3 s ... 3 s; 3 s ... 12 s	286-616	126						
	10 s ... 100 s; 100 s ... 800 s								
Multifunction Timing Relays 24 VDC	0.3 s ... 3 s; 3 s ... 12 s			286-640		127			
	10 s ... 100 s; 100 s ... 800 s			286-640/004-000		150			



859 Series



857 Series



788 Series



286 Series

Optocouplers

Function	Input	Output	Max. Perm. Continuous Current	859 Series		857 Series		788 Series		286 Series				
				Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page			
2-Wire Optocouplers	5 VDC	24 VDC	100 mA	859-795	40									
		60 VDC		859-793	39									
	24 VDC	24 VDC		2 A	859-796	40	857-724	58						
				3 A	859-730	42								
		3.5 A	859-740	42					788-700	84				
		5 A							788-701	84				
		2 x 24 VDC	0.5 A			857-1432	61							
	48 VDC	100 mA			857-704	54								
	60 VDC	100 mA		859-791	39					286-791	133			
										286-794	134			
	240 VAC	1 A			857-714	56								
									788-720	85				
	2 x 24 VDC	2 x 250 mA									286-790	135		
											286-792	134		
	2 x 24 VDC	2 x 3 ... 30 VDC	3 A			857-1430	60							
		2 x 9 ... 60 VDC	0.1 A			857-1494	60							
	24 V AC/DC	12 ... 275 VAC	2 A						788-721	85				
	115 V AC/DC	48 VDC	100 mA			857-707	54							
240 VAC		1 A			857-717	56								
24 VDC		2 A			857-727	58								
230 V AC/DC	48 VDC	100 mA			857-708	55								
	240 VAC	1 A			857-718	57								
	24 VDC	2 A			857-728	59								
2-Wire Optocouplers with zero volt switch	5 VDC	230 VAC	0.5 A	859-902	47						286-732	132		
	12 VDC		1 A								286-733	132		
	24 VDC										286-734	132		
3-Wire Optocouplers positive switching	5 VDC	24 VDC	0.5 A	859-752	45						286-750	128		
		5 VDC		859-756	46							286-751	128	
		15 VDC										286-752	128	
	24 VDC	24 VDC	4 A									286-723	131	
		24 VDC programmable (L or H)		300 mA								286-938	135	
		5 VDC	0.5 A									286-754	129	
	15 VDC										286-756	129		
	24 VDC	859-772		43							286-758	129		
3-Wire Optocouplers negative switching	5 VDC	24 VDC	0.5 A	859-702	44						286-726	132		
		110 VDC	1.6 A								286-728	132		
	24 VDC	5 VDC	0.5 A		859-706	45						286-700	128	
		15 VDC										286-701	128	
		24 VDC	24 VDC	2 A		859-708	44					286-702	128	
				3 A	859-720	41							286-720	130
				5 A									286-721	130
	110 VDC	1.6 A									286-730	132		
	230 VAC	5 VDC	0.5 A									286-704	129	
		15 VDC										286-706	129	
24 VDC		859-712		43							286-708	129		
10 ... 30 V AC/DC	24 VDC	1 ... 500 mA								286-725	133			
Power Optocouplers	S0 current meter interface	AC Output									286-740	136		
		DC Output									286-741	136		
Supply Module	passive S0 current meter interfaces										286-742	137		



286 Series



289 Series

Special Functions

Funktion		289 / 789 Series		286 Series		
		Item No.	Page	Item No.	Page	
NAMUR Switching Amplifiers	with relay output 250 VAC /120 VDC			286-880	138	
	with transistor output 24 VDC			286-881	138	
Current Flow Monitoring Modules	AC/DC 15 mA DC/35 mA ... 300 mA AC	Optocoupler		286-659	140	
	AC 80 mA ... 6 A	Transformer		286-661	140	
	AC 0.2 A ... 3 A	1 changeover contact		286-664	141	
	AC 1 A ... 10 A	1 changeover contact		286-665	141	
	DC 0.4 A ... 1.5 A	1 make contact		286-662	141	
Switching Modules	1-pole changeover	with changeover rocker switch		286-895	139	
		with momentary switch		286-896	139	
	manual-0-automatic switch	with monitoring contact	789-323	159		
		with switch position monitoring	789-325	160		
				789-329	161	
Bridge Rectifiers	230 V / 1 A AC			280-804/281-419	143	
	230 V / 1 A AC			286-840	142	
	24 V / 1 A AC	with varistor protection		286-830	142	
Fuse Module for replaceable microfuses 5 x 20 mm	Operating voltage 24 V AC/DC	Blown fuse indication, LED green		286-890	144	
	Operating voltage 230 V AC/DC	Blown fuse indication, neon lamp		286-891	144	
Diode Gate Modules	common anode	3 diodes		286-803	145	
		5 diodes		286-805	145	
		7 diodes		286-807	145	
	common cathode	9 diodes		286-809	145	
		3 diodes		286-813	145	
		5 diodes		286-815	145	
		7 diodes		286-817	145	
		9 diodes		286-819	145	
Polarized Diode Gate	common anode	14 diodes	289-121	212		
	common cathode	14 diodes	289-111	212		
Open Diode Gate	with 8 diodes, individual connection possible	Diode 1 N 4007	289-101	210		
		Diode P 600 B	289-103	210		
	with 9 diodes, individual connection possible	Diode 1 N 5408	289-105	211		
AND Gate Module	with 6 inputs, relay output with 1 make contact			286-826	146	
Flip-Flop Module	Operating voltage 24 VDC			286-825	147	
LED Indicator Module	with 8 LEDs	common cathode		286-822	146	
LED Gate Module	with 16 LEDs	common anode	289-202	213		
		common cathode	289-201	213		
Lamp Test Circuit	with 20 diodes for testing 10 lamps		289-151	213		
Open Resistor Gate	with 8 resistors, individual connection possible		289-114	214		
Resistor Gate	with 1 end commoned, 8 resistors		289-113	214		
Fault Indicator Modules, with reset	Auxiliary and fault indication voltage 230 VAC	Alarm with continuous light		286-681	148	
	60 VDC	Alarm with continuous light		286-684	148	
	24 VDC	Indication of original fault with single flashing light		286-683	149	
Connection Modules for sensors and actuators	8 x 3-conductor sensors	LED indicator for positive switching	289-664	208		
		LED indicator for negative switching	289-665	208		
			289-666	208		
	8 actuators		289-667	208		
		with ground (earth) contact	289-671	208		