

Modular DIN-rail devices

Comfort Functions

New
2017





2	LED Indication Lamp - Aster BL
4	Relays - Contax R
8	Impulse Switches - Pulsar S
14	Staircase Switches - Pulsar SC
16	Universal reliable multifunction - Time Relays
20	Time Relays - Pulsar T+
24	DIN-rail dimmers - DIM
30	Analogue Time Switches - Classic
32	Digital Time Switches - Galax
36	Time Switches - 72 x 72 Classic and Galax
38	Light Sensitive Switches - Galax LSS
	Numerical index
40	by reference number
41	by catalogue number



Assembled indication lamps

Aster BL

Modular DIN-rail devices



Applications



Mainly used to visualize the status of a (sub)part of the installation, heater, motor, fan, pump etc.

Standards / Marking

VDE 0633, BS EN 60730-1, BS EN 60730-2-7



Features

Available in different colored leds. UNIVERSAL Current application DC/AC.

Functions

Status visualisation.

Performance

Standards	EN 60 947-5-1
Number of poles	1
Rated voltage U _n	V AC 230
	V DC 230
Light source	high capacity LED diode
Light source capacity W	0,8
Colours	green - G, red - R, blue - B, Yellow-Y
Terminal capacity mm ²	0,75 - 6 for Cu conductors
Mounting	on rail DIN 35x7,5 EN 60 715
Degree of protection	IP 20
	IP 40 from the front panel
Ambient air temperature °C	from -25 to +55
Working positions	optional



Aster BL - Assembled indication lamps



Nominal voltage	Color	Number of modules	Cat. No.	Ref. No.	Pack.
230 V AC/DC	Red	1	ASTBLR230	661692	12
230 V AC/DC	Green	1	ASTBLG230	661693	12
230 V AC/DC	Blue	1	ASTBLB230	661694	12
230 V AC/DC	Yellow /Amber	1	ASTBLY230	661695	12

Aster BL



Relays

Contax R



Applications



- Switching of lighting, heating, etc.
- Galvanic insulation of i.e. status signalisation lamps from a (high) power (high voltage) circuit.
- Galvanic insulation of PLC-inputs or outputs to avoid destruction through excessive voltage.

Standards / Marking

IEC/EN 61095, IEC/EN 60947-4-1,
IEC/EN 60947-5-1



Features

- The switch position is visualised by the position of the front handle.
- The safety terminals are equipped with captive Pozidriv screws and have IP20 protection degree.
- Add-on auxiliary contacts available.
- Because of the advanced product design, no spacers are needed.
- Increased safety: sealing caps for both coil and terminal are available.

Functions

Relays are electromechanically controlled switches used to control low power loads.

Performance

				Contax R
Rated current (according to EN 60947-4-1)				
230VAC (1 and 2 pole) / 400VAC (3 and 4 pole)		A		16
Nominal thermal current (I _{th})		A		16
Number of pole				1 → 4
Contacts	NO			1 → 4
	Changeover			1 → 2
	NO + NC			1+1 / 2+2
Width (in 17.8mm DIN modules)	1P and 2P	Mod.		1
	3P and 4P	Mod.		2
Coil specifications				
Supply voltage range (in % of U _n)		%		85-110
Coil voltage frequency		Hz		50/60
Coil pick-up power	1P and 2P	VA		10
	3P and 4P	VA		25
Coil power loss - AC	1P and 2P	VA		1.2
	3P and 4P	VA		1.6
Maximum coil holding voltage time				unlimited
Contact bounce time at closing		sec.		< 0.010
Operate and release time				
Pick-up time (from 0 to U _n)	NO contact	sec.		< 0.025
	NC contact	sec.		< 0.025
Drop-out time (from U _n to 0)	NO contact	sec.		< 0.030
	NC contact	sec.		< 0.030
Maximum peak current at closing				
Single phase 230V AC cos ψ = 0.95				70
3-phase 400V~ cos ψ = 0.65				70
Maximum peak current at opening				
Single phase 230V AC cos ψ = 0.95				56
3-phase 400V~ cos ψ = 0.65				56
Lifetime (in number of operations)				
Electrical (in AC-1 - At full load)				2 x 10 ⁵
Mechanical				3 x 10 ⁶
Load specifications per phase				
Maximum load AC-1	1P and 2P	kW		2.9
	3P and 4P	kW		8.8
Maximum load AC-5b		kW		2.0
Maximum load AC-7b		kW		1.1
Maximum load AC-3	230V AC	kW		1.1
	400V AC	kW		3.0
Minimum load (under 5V)		W		2
Short-circuit fuse protection		A		16
General specifications				
Auxiliary contact add-on (CTX R)				yes
Need for spacer				no
DIN rail mounting				yes
Front handle for manual operation				yes
Permanent ON/OFF				no
Indicator of contact position				yes
Clamping terminals				yes
Unlosable screws				yes
Sealable terminals (coil and load)				yes
Cable cross section (Ø min/max)	Coil	mm ²		1.0 / 2.5
	Load	mm ²		1.0 / 10
Maximum torque on terminals	Coil / load	Nm		0.6 / 1.2
Ambient temperature at installation point (min./max.)		°C		- 15 / 55



Comfort Functions

Impulse switches, Contax L and relays: maximum lamp loads

Modular DIN-rail devices

Lamps type	Lamp Watts Power consumption	Pulsar S PULSAR16	Pulsar S PULSAR 32	Contax R	Contax L Contactors 20A	Contax L Contactors 25A	Contax L Contactors 40A	Contax L Contactors 63A
Incandescent lamps								
Max. load 230VAC		2100W	3600W	2100W	2100W	2220W	4050W	5100W
Max. number of lamps	15W	133	233	133	133	147	267	333
	25W	80	140	80	80	88	160	200
	40W	50	88	50	50	55	100	125
	60W	33	58	33	33	37	67	83
	75W	27	47	27	27	29	53	67
	100W	20	35	20	20	22	40	50
	150W	13	23	13	13	15	27	33
	200W	10	18	10	10	11	20	25
	300W	7	12	7	7	7	13	17
	500W	4	7	3	4	4	8	10
Fluo lamp PF uncorrected								
Max. load 230VAC		1560W	1560W	845W	845W	1105W	1950W	3120W
Max. number of lamps	18W	43	43	24	24	30	54	86
	36W	37	37	20	20	26	47	74
	40W	37	37	20	20	26	47	74
	58W	24	24	13	13	17	30	48
	65W	24	24	13	13	17	30	48
Fluo twin lamps								
Max. load 230VAC		2730W	2730W	1360W	1360W	1760W	4320W	6500W
Max. number of lamps	2x18W	62	62	31	31	40	100	150
	2x36W	33	33	17	17	22	54	81
	2x40W	33	33	17	17	22	54	81
	2x58W	21	21	10	10	13	33	50
	2x65W	21	21	10	10	13	33	50
Fluo lamp parallel compensation								
Max. load 230VAC		720W	1365W	390W	390W	325W	2015W	3055W
Max. number of lamps	18W	18	33	7	7	8	49	73
	36W	18	33	7	7	8	49	73
	40W	18	33	7	7	8	49	73
	58W	11	21	4	4	5	31	47
	65W	11	21	4	4	5	31	47
Halogen 230V								
Max. load 230VAC		2100W	3600W	2100W	2100W	2250W	4050W	5100W
Max. number of lamps	150W	13	23	13	13	15	27	33
	250W	8	14	8	8	9	16	20
	300W	7	12	7	7	7	13	17
	400W	5	9	5	5	6	10	13
	500W	4	7	4	4	4	8	10
	1000W	2	4	2	2	2	4	5
HP sodium vapour								
Max. load 230VAC		1200W	1600W	800W	800W	1000W	2500W	3300W
Max. number of lamps	70W	13	16	9	9	10	30	35
	150W	7	9	5	5	6	17	22
	250W	4	5	3	3	4	10	13
	400W	3	4	2	2	2	6	8
	1000W	1	1	-	-	1	3	3
LP sodium vapour								
Max. load 230VAC		1800W	2880W	540W	540W	720W	1800W	2340W
Max. number of lamps	55W	15	27	7	7	9	23	30
	90W	10	18	4	4	5	14	19
	135W	10	18	3	3	4	10	13
	180W	10	16	3	3	4	10	13
	185W	9	15	2	2	3	9	12
HP mercury vapour								
Max. load 230VAC		1250W	2000W	1000W	1000W	1250W	3000W	4000W
Max. number of lamps	50W	17	27	14	14	18	38	55
	80W	13	20	10	10	13	29	42
	125W	8	13	7	7	9	20	29
	250W	5	7	4	4	5	10	15
	400W	3	5	2	2	3	7	10
	1000W	1	2	1	1	1	3	4
VLV halogen								
Max. load 230VAC		1050W	3000W	1050W	1050W	1200W	2700W	4350W
Max. number of lamps	20W	50	150	50	50	60	135	215
	50W	20	60	20	20	24	54	86
	75W	14	40	14	14	16	36	57
	100W	10	30	10	10	12	27	43
	150W	7	20	7	7	8	18	29
	200W	5	15	5	5	6	14	22
	300W	3	10	3	3	4	9	14
Electronic reactor								
Max. load 230VAC		720W	2800W	470W	470W	720W	2090W	2880W
Max. number of lamps	1x18W	33	133	22	22	35	100	139
	1x36W	19	75	13	13	20	56	78
	1x58W	11	43	7	7	11	32	45
	2x18W	18	71	12	12	19	53	74
	2x36W	10	39	6	6	10	29	40
	2x58W	5	21	4	4	6	16	22
LEDs								
Max. load 230VAC								
	Non dimmable	2A	12A	1.5A	2.4A	3.8A	11A	18A
	Dimmable	2A	12A	1.5A	2.4A	3.8A	11A	18A



Comfort Functions

Pulsar Impulse switches range

Modular DIN-rail devices

Impulse switches are switching devices without power consumption in operating switch-on position and very small power consumption per pole. On a very effective way helps to reduce greenhouse gas emissions of CO2.



Main Benefits

- Small switch on coil consumption
- No hold coil consumption
- Wide application
- Mounting on 35mm rail
- Sealing terminal covers
- All control voltages from 8V till 240V are possible

For remote switching

- Advanced operation
- Lights and lighting
- Electric heating
- Electric drives

Intelligent installations

- Impulse control
- Manual control

Main features

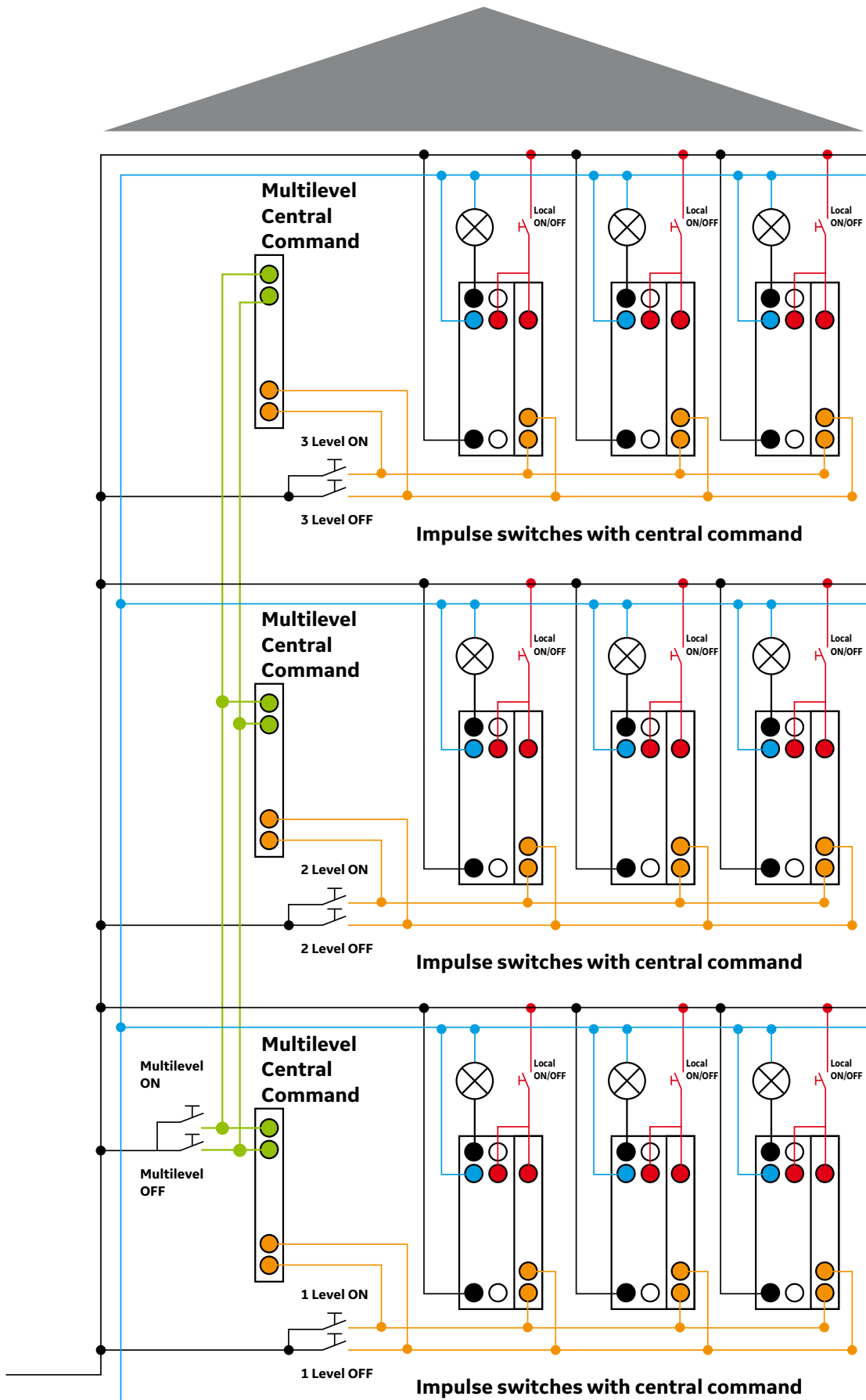
- Redline shape
- Pozidriv screws
- Market terminals
- Electric diagram in front of the device

Plenty of accessories

- Sealing cover
- Capacitor
- Auxiliaries
- General command
- Multilevel



Full functionality





Pulsar S



Applications



Mainly used for the switching of lighting and heating equipment and/or to obtain a simplified wiring in case the load needs to be controlled at reduced voltage and/or from more than 2 different places.

Standards / Marking

IEC/EN 60669-1, IEC/EN 60669-2-2



Features

- Besides the normal operation through electrically energising the coil, manual operation is possible at all times.
- The switch position is visualised by the position of the front handle for all devices.
- The central command version was developed to force several devices at the same time to the on or off position, independently of the current status of each individual device. Also in this case, the possibility of operating the device locally remains.
- The safety terminals are equipped with captive Pozidriv screws and have IP20 protection degree.
- An add-on auxiliary contact, add-on central-command module and a spacer are available.
- The use of a large number of luminous push-buttons is possible.
- Availability of sealing cap for coil and load terminals.

DIN-rail positioning: used in vertical/horizontal position

Functions

Impulse switches are electromechanically controlled switches used to control single- or multi-phase medium-power loads while the control itself can be (very) low power.

The device switches between 2 stable positions, each time a (brief) impulse energises its control circuit.















Performance

		PLS +			PLS + C	
		PLS + 16	PLS + 32	PLS + PU 16	PLS + C 16	PLS + C 32
Rated current (according to IEC/EN 60669-2-2)						
250VAC (1 pole) / 440V AC (2, 3 and 4 pole)	A	16	32	16	16	32
Direct current (at 30V DC)	A	16	20	16	16	20
Number of pole		1 → 4	1 → 4	1 → 4	1 → 4	1 → 3
Contacts						
	NO	1 → 4	1 → 4	1 → 4	1 → 3	-
	Changeover	1 → 2	-	1 → 2	1 → 2	-
	NO + NC	1+1 / 2+2	-	1+1 / 2+2	-	-
Width (in 17.8mm DIN modules)						
	1 P	Mod. 1	1	1	1	1
	2 P	Mod. 1	1	1	1 ½	1 ½
	3 P	Mod. 2	2	2	-	2 ½
	4 P	Mod. 2	2	2	2 ½	-
Coil specifications						
Supply voltage range (in % of Un)	%	90-110	90-110	90-110	90-110	90-110
Coil pick-up power	1P and 2P	VA 18	18	18	18	18
	3P and 4P	VA 18	18	18	18	18
Coil power loss - AC	1P and 2P	VA 9	9	9	9	9
	3P and 4P	VA 9	9	9	9	9
Maximum coil holding voltage time		1h	1h	permanent	1h	1h
Impulse times						
Minimum impulse time (under Un)	sec.	0.050	0.050	0.050	0.050	0.050
Minimum impulse time (90% Un)	sec.	0.100	0.100	0.100	0.100	0.100
Minimum time between impulses	sec.	0.150	0.150	0.150	0.150	0.150
Maximum number of impulses per hour		900	450	900	900	600
Lifetime (in number of operations)						
Electrical (AC - At full load)		2 × 10 ⁵	2 × 10 ⁵	2 × 10 ⁵	2 × 10 ⁵	2 × 10 ⁵
Mechanical		2 × 10 ⁶	2 × 10 ⁶	2 × 10 ⁶	2 × 10 ⁶	2 × 10 ⁶
Load specifications						
Maximum load AC-1	A	16	32	16	16	32
Maximum load DC (30V DC)	A	16	20	16	16	20
Minimum load per phase (under 5V)	W	2	2	2	2	2
Short-circuit fuse protection	A	16	32	16	16	32
Maximum number of push-buttons						
Non illuminated push-buttons		unlimited	unlimited	unlimited	unlimited	unlimited
Luminous push-buttons (0.6mA)						
	Without compensator	4	4	4	4	4
	1 compensator	30	30	30	30	30
	2 compensators	50	50	50	50	50
General specifications						
Auxiliary contact add-on (PLS)		yes	yes	yes	no	no
Need for spacer (up to 40°C) ⁽¹⁾		no	no	yes	no	no
DIN rail mounting		yes	yes	yes	yes	yes
2-POSITION HANDLE		yes	yes	yes	yes	yes
Indicator of contact position		yes	yes	yes	yes	yes
Clamping terminals		yes	yes	yes	yes	yes
Unlosable screws		yes	yes	yes	yes	yes
Sealable terminals (coil and load)		yes	yes	yes	yes	yes
Cable cross section (Ø min/max)	Coil	mm ² 1 / 4	1 / 4	1 / 4	1 / 4	1 / 4
	Load 1P-3P and 4P	mm ² 1 / 10	1 / 10	1 / 10	1 / 10	1 / 10
	Load 2P	mm ² 1 / 10	1 / 10	1 / 10	1 / 10	1 / 10
	Coil / Load	mm ² 1.2 / 0.6	1.2 / 0.6	1.2 / 0.6	1.2 / 0.6	1.2 / 0.6
Ambient temperature at installation point (min./max.)	°C	-25 / 55	-25 / 55	-25 / 55	-25 / 55	-25 / 55

(1) For temperatures 40 ... 55°C the spacer is required on the side of 3 switches side-by-side and for temperatures 55 ... 70 °C the spacer is required on the side of each switch.






















Pulsar S - Impulse switches

	Nominal current	Contact combination	Coil voltage AC	Number of modules	Cat. No.	Ref. No.	Pack.
 <p>Impulse switches 1NO</p> 	16A	1NO	8V	1	PULSAR1610008A	685779	1
	16A	1NO	12V	1	PULSAR1610012A	685780	1
	16A	1NO	24V	1	PULSAR1610024A	685781	1
	16A	1NO	48V	1	PULSAR1610048A	685782	1
	16A	1NO	115V	1	PULSAR1610115A	685783	1
	16A	1NO	230V	1	PULSAR1610230A	685784	1
	16A	1NO	230V/60Hz	1	PULSAR16123060	685785	1
	16A	1NO	240V	1	PULSAR1610240A	685786	1
 <p>1CO</p> 	16A	1CO	8V	1	PULSAR161008A	685787	1
	16A	1CO	12V	1	PULSAR161012A	685788	1
	16A	1CO	24V	1	PULSAR161024A	685789	1
	16A	1CO	48V	1	PULSAR161048A	685790	1
	16A	1CO	115V	1	PULSAR161115A	685791	1
	16A	1CO	230V	1	PULSAR161230A	685792	1
	16A	1CO	240V	1	PULSAR161240A	685793	1
	 <p>2NO</p> 	16A	2NO	8V	1	PULSAR1620008A	685794
16A		2NO	12V	1	PULSAR1620012A	685795	1
16A		2NO	24V	1	PULSAR1620024A	685796	1
16A		2NO	48V	1	PULSAR1620048A	685797	1
16A		2NO	115V	1	PULSAR1620115A	685798	1
16A		2NO	230V/60Hz	1	PULSAR162023060	685799	1
16A		2NO	230V	1	PULSAR1620230A	685800	1
16A		2NO	240V	1	PULSAR1620240A	685801	1
 <p>1NO 1NC</p> 	16A	1NO 1NC	8V	1	PULSAR1611008A	685802	1
	16A	1NO 1NC	12V	1	PULSAR1611012A	685803	1
	16A	1NO 1NC	24V	1	PULSAR1611024A	685804	1
	16A	1NO 1NC	48V	1	PULSAR1611048A	685805	1
	16A	1NO 1NC	115V	1	PULSAR1611115A	685806	1
	16A	1NO 1NC	230V	1	PULSAR1611230A	685807	1
	16A	1NO 1NC	230V/60Hz	1	PULSAR161123060	685808	1
	16A	1NO 1NC	240V	1	PULSAR1611240A	685809	1
 <p>2CO</p> 	16A	2CO	8V	2	PULSAR162008A	685810	1
	16A	2CO	12V	2	PULSAR162012A	685811	1
	16A	2CO	24V	2	PULSAR162024A	685812	1
	16A	2CO	48V	2	PULSAR162048A	685813	1
	16A	2CO	115V	2	PULSAR162115A	685814	1
	16A	2CO	230V	2	PULSAR162230A	685815	1
	16A	2CO	240V	2	PULSAR162240A	685816	1
	 <p>1NO</p> 	32A	1NO	8V	1	PULSAR3210008A	685817
32A		1NO	12V	1	PULSAR3210012A	685818	1
32A		1NO	24V	1	PULSAR3210024A	685819	1
32A		1NO	48V	1	PULSAR3210048A	685820	1
32A		1NO	115V	1	PULSAR3210115A	685821	1
32A		1NO	230V	1	PULSAR3210230A	685822	1
32A		1NO	240V	1	PULSAR3210240A	685823	1
 <p>2NO</p> 		32A	2NO	8V	1	PULSAR3220008A	685824
	32A	2NO	12V	1	PULSAR3220012A	685825	1
	32A	2NO	24V	1	PULSAR3220024A	685826	1
	32A	2NO	48V	1	PULSAR3220048A	685827	1
	32A	2NO	115V	1	PULSAR3220115A	685828	1
	32A	2NO	230V	1	PULSAR3220230A	685829	1
	32A	2NO	240V	1	PULSAR3220240A	685830	1



Pulsar S - Impulse switches

	Nominal current	Contact combination	Coil voltage AC	Number of modules	Cat. No.	Ref. No.	Pack.
All-in central command       	16A	1NO	8V	1.5	PULSARC1610008A	685831	1
	16A	1NO	12V	1.5	PULSARC1610012A	685832	1
	16A	1NO	24V	1.5	PULSARC1610024A	685833	1
	16A	1NO	48V	1.5	PULSARC1610048A	685834	1
	16A	1NO	230V	1.5	PULSARC1610230A	685835	1
	16A	1NO	240V	1.5	PULSARC1610240A	685836	1
	16A	1CO	8V	1.5	PULSARC161008A	685837	1
	16A	1CO	12V	1.5	PULSARC161012A	685838	1
	16A	1CO	24V	1.5	PULSARC161024A	685839	1
	16A	1CO	48V	1.5	PULSARC161048A	685840	1
	16A	1CO	230V	1.5	PULSARC161230A	685841	1
	16A	1CO	240V	1.5	PULSARC161240A	685842	1
	16A	2NO	8V	1.5	PULSARC1620008A	685843	1
	16A	2NO	12V	1.5	PULSARC1620012A	685844	1
	16A	2NO	24V	1.5	PULSARC1620024A	685845	1
	16A	2NO	48V	1.5	PULSARC1620048A	685846	1
	16A	2NO	230V	1.5	PULSARC1620230A	685847	1
	16A	2NO	240V	1.5	PULSARC1620240A	685848	1
16A	2CO	8V	2.5	PULSARC162008A	685849	1	
16A	2CO	12V	2.5	PULSARC162012A	685850	1	
16A	2CO	24V	2.5	PULSARC162024A	685851	1	
16A	2CO	48V	2.5	PULSARC162048A	685852	1	
16A	2CO	230V	2.5	PULSARC162230A	685853	1	
16A	2CO	240V	2.5	PULSARC162240A	685854	1	
  	32A	1NO	8V	1.5	PULSARC3210008A	685855	1
	32A	1NO	12V	1.5	PULSARC3210012A	685856	1
	32A	1NO	24V	1.5	PULSARC3210024A	685857	1
	32A	1NO	48V	1.5	PULSARC3210048A	685858	1
	32A	1NO	230V	1.5	PULSARC3210230A	685859	1
	32A	1NO	240V	1.5	PULSARC3210240A	685860	1
	32A	2NO	8V	1.5	PULSARC3220008A	685861	1
	32A	2NO	12V	1.5	PULSARC3220012A	685862	1
	32A	2NO	24V	1.5	PULSARC3220024A	685863	1
	32A	2NO	48V	1.5	PULSARC3220048A	685864	1
	32A	2NO	230V	1.5	PULSARC3220230A	685865	1
	32A	2NO	240V	1.5	PULSARC3220240A	685866	1
	32A	3NO	8V	2.5	PULSARC3230008A	685867	1
	32A	3NO	12V	2.5	PULSARC3230012A	685868	1
	32A	3NO	24V	2.5	PULSARC3230024A	685869	1
	32A	3NO	48V	2.5	PULSARC3230048A	685870	1
	32A	3NO	230V	2.5	PULSARC3230230A	685871	1
	32A	3NO	240V	2.5	PULSARC3230240A	685872	1
	16A	2NO	24V	1	PULSARPU162024A	685873	1
	16A	2NO	230V	1	PULSARPU162230A	685874	1
	16A	2CO	24V	2	PULSARPU1620024A	685875	1
	16A	2CO	230V	2	PULSARPU1620230A	685876	1
	16A	4NO	24V	2	PULSARPU1640024A	685877	1
	16A	4NO	230V	2	PULSARPU1640230A	685878	1
Add-on auxiliary contact  	6A	1NO 1NC	-	0.5	PULSARAUX11	685879	1
	6A	2NO	-	0.5	PULSARAUX20	685880	1
	-	A2 OFF ON	-	0.5	PULSARC	685881	1
	-	OFF ON OFF ON	-	0.5	PULSARM	685882	1
	-	-	230/240V	-	PULSARCAPM	685884	1
	-	-	-	1	PULSARCAP	685885	2
	-	-	-	0.5	PLC/CTX SP	686069	50



Staircase switches

Pulsar SC



Applications



Lighting or ventilation of staircases, basements, halls, etc

Standard

EN 60669-2-1



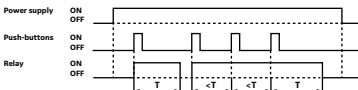
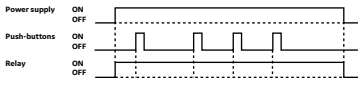
Features

- Designed for a real 4.000W switching capacity.
- User adjustable time.
- 3 or 4 wire wiring possible.
- Safety terminals equipped with captive PH screws and IP20 protection degree.
- Anti vandalism: resistant to blocked push-buttons.

Functions

The staircase switch Pulsar SC is an electronic switching device with micro-distance (μ) of opening between contacts. It manages over time the lights permanence in rooms such as hallways, stairs, cellars to avoid wasting energy.

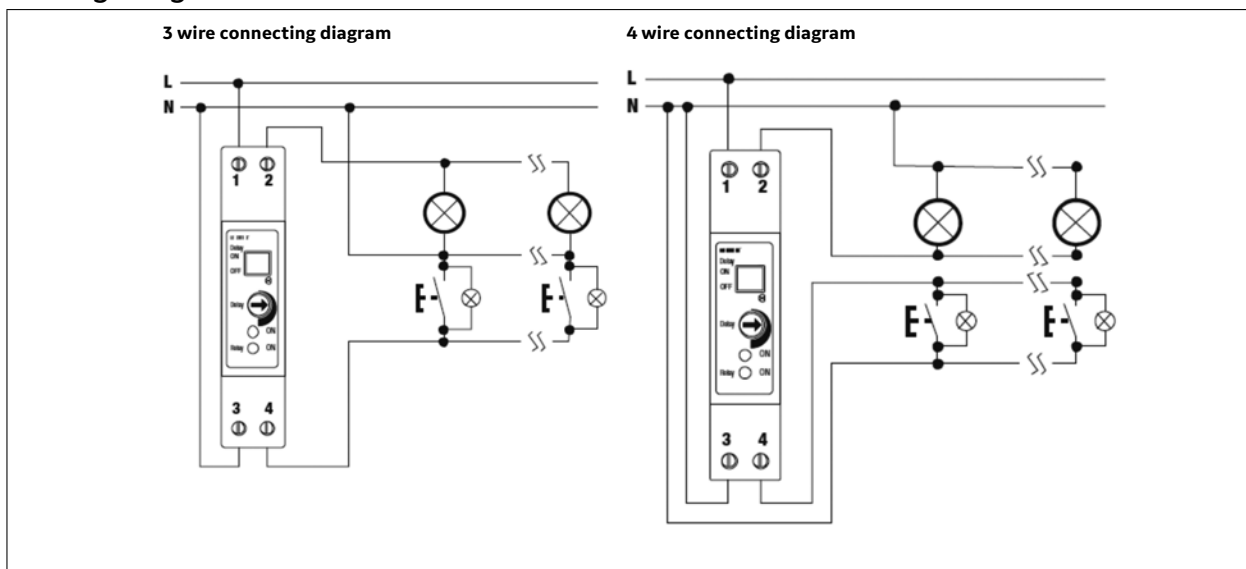
Pulsar SC - Staircase switches

	Nominal Current	Contact Combination	Coil Voltage AC	Coil Voltage DC	Number of modules	Cat. No.	Ref. No.	Pack.
 <p>Electronic staircase switch 1 NO</p> 	16A	1 NO	230 V AC(-15%..+10%)	-	1	PULSAR SC 1-15 16A 1M	687474	1
<p>Automatic</p> 		<p>Staircase light fixed on</p> 						

Performance

			PULSAR SC
Rated current (acc. IEC 669-2-3)		A	16
Width	(in number of DIN-modules)		1
Contacts		NO	1
Time range		2 function	30 sec. - 20 min.
Supply voltage		230V - 50/60 Hz	yes
	Supply voltage range (in % of Un)	%	85 - 110
Rated power consumption			
	Closed circuit current	230V VA	6 (1W)
	Working current (ignition and running)	230V VA	6 (1W)
Light types			
	Incandescent lamps		yes
	Fluorescent lamps		yes
	LED		yes
Load type P max			
	Incandescent lamps (230V)	W	4000
	Fluorescence lamps (230V)	W	1000
	LED (<2W)	W	55
	LED (2-8W)	W	150
	LED (>8W)	W	180
Lifetime (in number of operations)			
	Electrical	at 1200W	5.10 ⁴
		at full load	1.10 ⁵
	Mechanical		1.10 ⁷
Max. number of push-buttons			
	Non illuminated push-buttons		unlimited
	Luminous push-buttons:		50 (1mA)
General specifications			
	DIN-rail mounting		yes
	Silent operations		yes
	3-wire and 4-wire installation		yes
	Resistent to blocked push-buttons		yes
	Continuously adjustable time-lag		yes
	Manual switching (number of positions)		2
	Front switch-off lever		yes
	Clamping screw terminals, unloosable screws	Coil mm ²	4
	Cable cross section (Ø min/max)	Load mm ²	1.0 / 2.5
	Maximum torque on terminals	N x m	0.6
	Ambient temperature at installation point (min./max.)	°C	0 / +50
	Storage temperature	°C	-10 / +60

Wiring diagram



Universal reliable multifunction

Multifunction Time Relays

Ten functions:

- Five time functions controlled via supply voltage
- Four time functions controlled via control input
- One latching relay function

Used for regular room ventilation, cyclic dehumidification, light control, circulating pumps, neon signs, etc.

Time Relay

Time Relay is defined as the controlled period between two operations. A Time relay is a combination of an electromechanical output relay and a control circuit. The control circuit comprises solid-state components and timing circuits that control the operation of the relay and the timing range.

Over time, advances in electronic technology have greatly increased the number and variety of applications available for industrial modular relays. Selecting a relay can often be difficult and confusing task. Hopefully, this brief explanation will help you to understand which factors to consider when selecting a time relay.

Relays perform the crucial function of using one level of voltage to control what is often a different level of voltage. They also provide a high degree of isolation between power wiring and control wiring. Time relays add an extra dimension in terms of application, as they allow the introduction of a time element into the control circuit. It is virtually impossible to design a control circuit in a system without using time relays.

Asymmetrical cycle Time Relay

Used for warning illumination on the road, flashers, cyclers, frequently-switched systems

The PLT+ Time relays range is highly versatile, it provides the basic switching or controlling function as mentioned, and the timing functions in the circuit. The PLT+ range is compact in size, with a modular 18 mm-width shape, and offers unrivalled performance in its function. Time relay contacts are rated from 8 Amp. (3 COM contacts in only 1 mod.) to 16 Amp. AC1.

Timing functions for the PLT+ time relays range include: Delay ON after energization, Delay OFF after energization, Cycler beginning with pause after energization, Cycler beginning with impulse after energization, Delay OFF after de-energization, Instant make of output, Delay OFF responding to make of control contact regardless its length, Delay OFF after break of control contact with instant output, Delay OFF after make and break of control contact, Impulse relay, Pulse generator, Asymmetrical Cycler beginning with pulse, Asymmetrical Cycler beginning with pause.

Timing values may be set using a rotary switch and potentiometer in the front of the device, from 0.1 seconds to 10 days.



Save energy

Examples of Use

- Stagger start of motors to limit inrush current.
- Security systems, delay system lockdown for a set period. This allows the person setting the alarm to clear the area.
- Stairwell light operated via momentary "ON" switch.
- Switch OFF delay of toilet exhaust fan. If used in conjunction with a light circuit, the timer will allow the fan to continue to operate (for a set delay time) after the light has been turned OFF.
- When connected to the main light switch, a True OFF delay timer allows the last person sufficient time to clear the building before all the lights are turned off.
- Running a discharge pump for 1 hour per every 10-hour cycle.
- Turning a beacon "ON" for 2 seconds per every 6-second cycle.

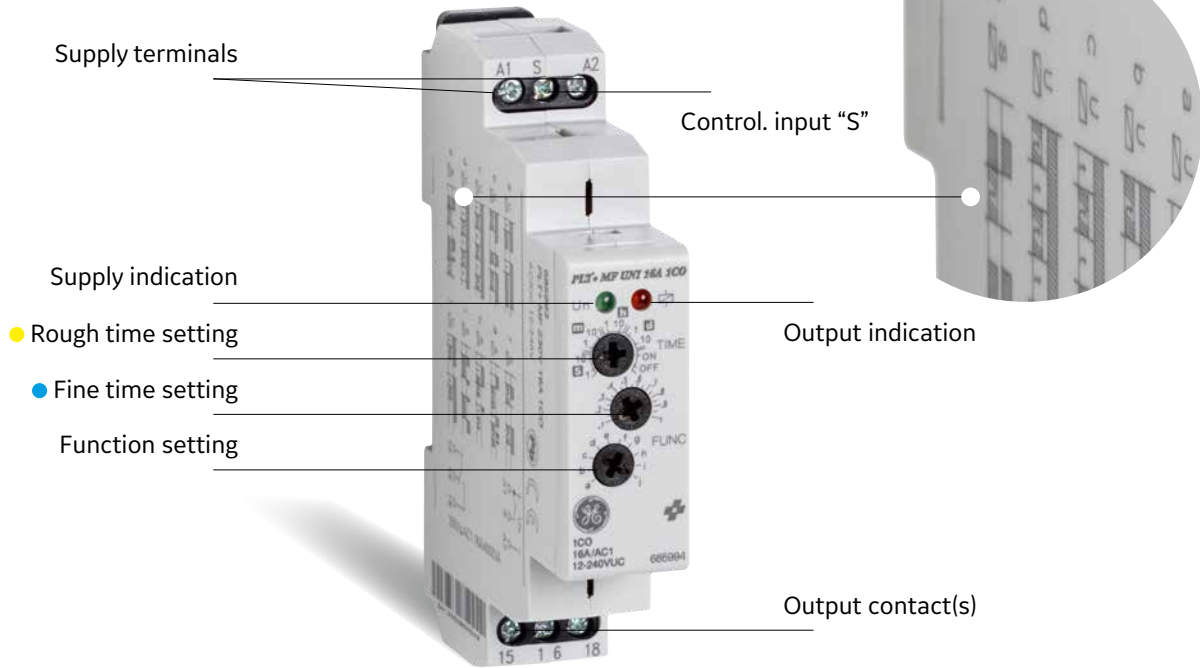




Performances and features

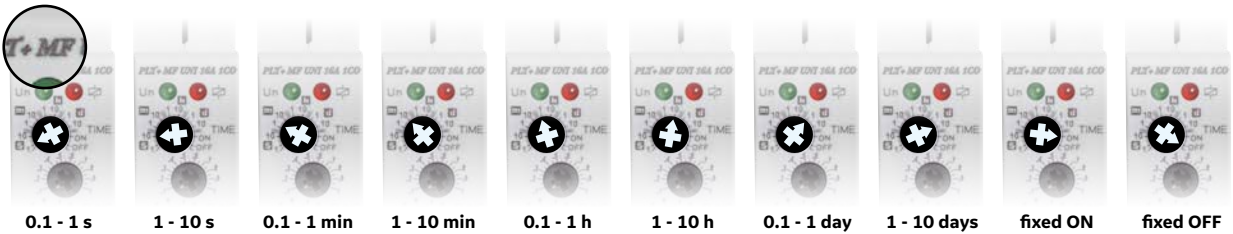
Multifunction Time Relays

Functions



Time Relays

Multifunctional cycle Time Relay (MF)

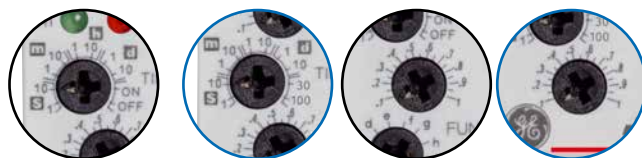


Rough time setting - IMPULS
time setting in range 0.1 .. 10 days



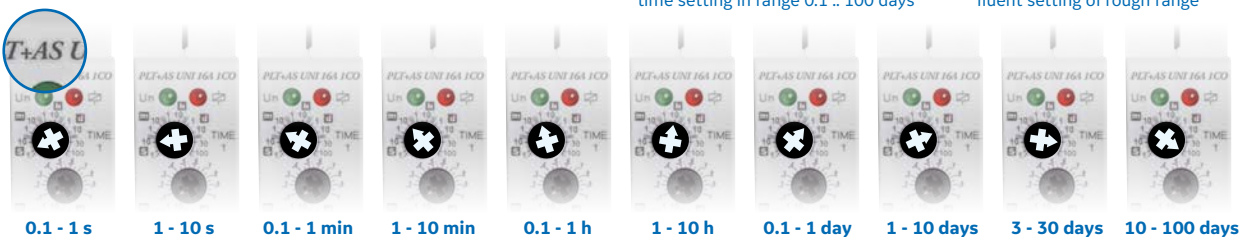
Fine time setting - IMPULS
fluent setting of rough range

Asymmetrical cycle Time Relay (AS)



Rough time setting - IMPULS /PAUSE
time setting in range 0.1 .. 100 days

Fine time setting - IMPULS /PAUSE
fluent setting of rough range



Temporize/Dim whatever you want

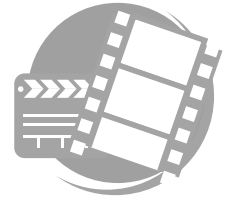
Our new DIM range dimmers have been specifically created to control R, L, C, LED light sources (dimmable) and energy-saving lamps.

The DIM RANGE is designed to be mounted on a DIN-rail onto panelboard. These dimmers have a number of characteristics that make them rank amongst the best on the market:

- The option to set the minimum brightness of the lamp - which eliminates flashing.
- Built-in protection, meaning that the light source will neither flash nor change brightness when the input voltage fluctuates. This dimmer is designed for use in a house, apartment or office.



Enjoy a movie



Dim it. And enjoy yourself

Conjure up rainbows of intense colour when watching fairy tales. Or do you like horror films? Bathe your living room in atmospheric light by programming your LED to shine in dark colours.

The positive impact of dimmers is not limited to private spaces; they can also add value to business premises, where the right lighting can help to create a commercial advantage.

Dimmers in hotels

From the moment hotel guests enter the lobby, they expect immaculate service and perfect comfort. This includes pleasant lighting in their hotel room. Dimmed lights contribute to wellbeing in a hotel room, and it is simple for each guest to adjust the lighting to meet his or her individual needs and preferences.

Dimmers in restaurants

In restaurants and bars, dimmers create the right lighting mood for guests. At the same time, bright lighting is required for laying tables and making preparations at the bar and buffet.

Dimmers in shops

In sales environments, optimal illumination of presentation areas and products is essential. Whenever changes are made to the shop concept, dimmers make it easy to adapt the lighting concept to a new product presentation.

Save up to 30% energy on lighting

Requirement

I want to maintain the same light intensity on my site.

Solution

Get the automatic DIM LC 300 UNI 230V lighting intensity controller, and you will no longer need to keep checking if your employees are switching off the lights.

How to do it?

Connect the product to your existing Push-button (you don't need to cut anything). It will enable you to control brightness or to switch to an automatic mode.

How much will you save?

A 40W lamp switched on for 8 hours for 200 days per year will equal 64KWh; and therefore ten of these lamps in a single office will equal 640kWh.

If you use an automatic lighting intensity controller, the intensity of the light will remain exactly where you set it. So if the sunshine is illuminating a room with high intensity, the lamp will automatically lower its brightness. This will enable you to save up to 50% of costs.





Performances and Features

DIM LC 300 UNI 230V

Labels for DIM LC 300 UNI 230V:

- Supply voltage L
- Thyristor
- Supply voltage indicator
- Light source type selection
- Automated reg. luminance adjustment
- Supply voltage N
- Output
- Output indication
- Automatic fade and luminance setting
- Min. luminance adjustment
- Terminals for connecting sensor
- Controlling input

Wiring diagram notes: T 2.5 A recommended upstream protection

Time Relays

DIM 300 UNI 230V

Labels for DIM 300 UNI 230V:

- Supply voltage L
- Supply voltage indication
- Light source type selection
- Minimal luminance setting
- Supply voltage N
- Output
- Output indication
- Controlling input

Wiring diagram notes: T 2.5 A ballast protection recommended





Time Relays

Pulsar T+

Features

- Multi-function time relay with 10 functions, 1 CO contact 16A or 3 CO contacts 8A
- Multi-voltage time relay two versions: AC/DC 12-240V (AC50-60Hz) and AC 230V (AC50-60Hz)
- Assymetrical time relay with 2 functions and multivoltage AC/DC 12-240V (AC50-60Hz)
- Only 4 references cover the complete range
- In the case of the multi-function relay, the function itself is also user selectable, bringing impulse switch function as default (factory setting)
- Compact version of 3 CO contacts 10 functions time relay in only 1 module!
- The loss-proof safety terminals are equipped with Pozidriv screws and have IP20 protection degree.

Applications



Asymmetrical cycle time relay
Using for warning illumination on the road, flashers, cyclers, often switched systems

Multifunction relays

10 functions:

- Five time functions controlled via supply voltage
- Four time functions controlled via control input
- One function of latching relay

It is used for regular room ventilation, cyclic dehumidification, light control, circulating pumps, noon signs, etc.

Functions

Conditioning of incoming source to exact predictable output.

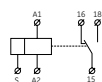
Standards / Marking

EN 61812-1, EN 61010-1

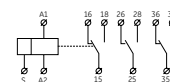


Wiring

1 COM



3 COM



Loads type

Product: PLT+MF230V16A1CO⁽¹⁾ PLT+MFUNI16A1CO PLT+ASUNI16A1CO

Type of load	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
mat. contacts AgNi, contact 16A	250V / 16A	250V / 5A	250V / 3A	230V / 3A (690VA)	x	800W	x	250V / 3A	250V / 10A
Type of load	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
mat. contacts AgNi, contact 16A	250V / 6A	250V / 6A	250V / 6A	24V / 16A	24V / 6A	24V / 4A	24V / 16A	24V / 2A	24V / 2A

Product: PLT+MFUNI8A3CO

Type of load	AC1	AC2	AC3	AC5a uncompensated	AC5a compensated	AC5b	AC6a	AC7b	AC12
mat. contacts AgNi, contact 8A	250V / 8A	250V / 3A	250V / 32A	230V / 1.5A (345VA)	x	300W	x	250V / 1A	250V / 1A
Type of load	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
mat. contacts AgNi, contact 8A	x	250V / 3A	250V / 3A	24V / 8A	24V / 3A	24V / 2A	24V / 8A	24V / 2A	x

(1) Only at 230V AC



Pulsar T+ Time Relays

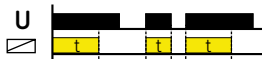


Nom. current	Cont. nr	Contact combin.	Funct. nr	Coil voltage AC	Coil voltage DC	Voltage tolerance	Timing scale	No. of mod.	Cat. No.	Ref. No.	Pack.
16A	1	1 COM	a ... j ⁽¹⁾	230V 50-60Hz	-	-15% ... +10%	0.1s ... 10 days	1	PLT+MF230V16A1CO	685993	1
16A	1	1 COM	a ... j ⁽¹⁾	12-240V 50-60Hz	12-240V	-15% ... +10%	0.1s ... 10 days	1	PLT+MFUNI16A1CO	685994	1
16A	1	1 COM	k, l	12-240V 50-60Hz	12-240V	-15% ... +10%	0.1s ... 100 days	1	PLT+ASUNI16A1CO	685996	1
8A	3	3 COM	a ... j ⁽¹⁾	12-240V 50-60Hz	12-240V	-15% ... +10%	0.1s ... 10 days	1	PLT+MFUNI8A3CO	685995	1

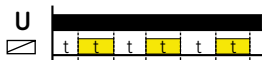
(1) Factory setting: i



a-On delay (Power On) When the input voltage U is applied, timing delay t begins. Relay contacts R change state after time delay is complete. Contacts R return to their shelf state when input voltage U is removed. Trigger switch is not used in this function.



b-Off delay When input voltage U is applied, relay contacts R change state immediately and timing cycle begins. When time delay is complete, contacts return to shelf state. When input voltage U is removed, contacts will also return to their shelf state. Trigger switch is not used in this function.



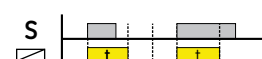
c-Repeat Cycle (Starting Off) When input voltage U is applied, time delay t begins. When time delay t is complete, relay contacts R change state for time delay t. This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function.



d-Repeat Cycle (Starting On) When input voltage U is applied, relay contacts R change state immediately and time delay t begins. When time delay t is complete, contacts return to their shelf state for time delay t. This cycle will repeat until input voltage U is removed. Trigger switch is not used in this function.



e-Off delay (S Break) Input voltage U must be applied continuously. When trigger switch S is closed, relay contacts R change state. When trigger switch S is opened, delay t begins. When delay t is complete, contacts R return to their shelf state. If trigger switch S is closed before time delay t is complete, then time is reset. When trigger switch S is opened, the delay begins again, and relay contacts R remain in their energized state. If input voltage U is removed, relay contacts R return to their shelf state.



f-Single Shot Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. During time-out, the trigger signal S is ignored. The relay resets by applying the trigger switch S when the relay is not energized.



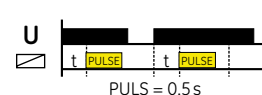
g-Single Shot Trailing Edge (Non-Retriggerable) Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of the trigger signal S, the relay contacts R transfer and the preset time t begins. At the end of the preset time t, the relay contacts R return to their normal condition unless the trigger switch S is opened and closed prior to time out t (before preset time elapses). Continuous cycling of the trigger switch S at a rate faster than the preset time will cause the relay contacts R to remain closed. If input voltage U is removed, relay contacts R return to their shelf state.



h-On/Off delay Input voltage U must be applied continuously. When trigger switch S is closed, time delay t begins. When time delay is complete, relay contacts R change state and remain transferred until trigger switch S is opened. If input voltage U is removed, relay contacts R return to their shelf state.



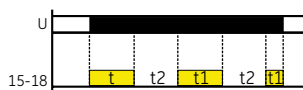
i-Latching relay Input voltage U must be applied continuously. Output changes state with every trigger switch S closure. If input voltage U is removed, relay contacts R return to their shelf state.



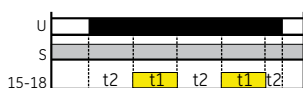
j-Pulse generator Upon application of input voltage U, a single output pulse of 0.5 seconds is delivered to relay after time delay t. Power must be removed and reapplied to repeat pulse. Trigger switch is not used in this function.

ASSYMETRICAL CYCLER RELAY

k-Cycler beginning with pulse



l-Cycler beginning with pause

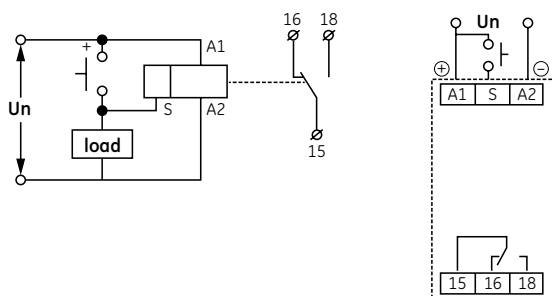




Technical data Time Relays

	PLT+MFUNI16A1CO	PLT+MF230V16A1CO	PLT+MFUNI8A3C	PLT+ASUNI16A1CO
Technical data				
Number of functions	10 (a...j)			2: k, l. (second func. is chosen by connecting S-A1)
Supply	A1-A2			
Supply voltage	AC/DC12-240V (AC50-60Hz)	AC 230V / 50 - 60Hz	AC/DC12-240V (AC50-60Hz)	AC/DC12-240V (AC50-60Hz)
Consumption	AC0.7-3VA/DC 0.5-1.7W	AC max. 12VA / 1.3W	AC max. 12VA/1.9W	AC0.7-3VA/DC 0.5-1.7W
Supply voltage tolerance	-15%; +10%			
Supply indication	green LED			
Time ranges	0.1 s - 10 days			
Time setting	rotary switch and potentiometer			
Time deviation	5% mechanical setting			
Repeat accuracy	0.2% set value stability			
Temperature coefficient	0.01% °C, at =20°C			
Output				
Changeover contacts	1 x changeover		3 x changeover	1 x changeover
Rated current	16A / AC1		8A / AC1	16A / AC1
Breaking capacity	4000VA/AC1;384W/DC		2000VA/AC1;192W/DC	4000VA/AC1;384W/DC
Inrush current	30 A/<3s		10 A/<3s	30 A/<3s
Switching voltage	250V AC1 / 24V DC			
Min. breaking capacity DC	500 mW			
Output indication	multifunction red LED			
Mechanical life	3 x 1000000			
Electrical life (AC1)	0.7 x 100000			
Controlling				
Consumption of input	AC 0.025-0.2 VA/ DC 0.1 - 0.7W (UNI), AC 0.53 VA (AC 230V)			-
Load between S-A2	YES ⁽¹⁾			NO
Glow tubes connections	230V - Yes / UNI - No			-
Max. amount of glow lamps connected to controlling input	UNI - glow lamps cannot connected/NO			-
Control terminals	A1-S			-
Impulse length	min. 25ms / max. unlimited			-
Other information				
Reset time	max. 150ms			
Operating temperature	-20.. +55°C			
Storage temperature	-30.. +70°C			
Electrical strength	4kV (supply-output)			
Operating position	any			
Mounting	DIN-rail EN 60715			
Protection degree	IP40 from front panel; IP20 terminals			
Overvoltage category	III.			
Pollution degree	2			
Max. cable size	max.1x2.5; max. 2x1.5/with cavern max. 1x2.5			
Dimensions	90 x 17.6 x 64 mm			
Weight (g)	64	62	89	65
Standards	EN 61812-1, EN 61010-1			

(1) Through clamps S-A2 can be connect the loading parallel (for example contactor or other units) - without damage of right operation.



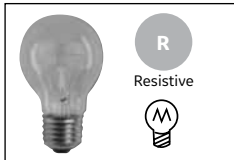


Dimmers

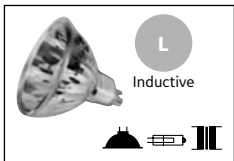
Today we encounter all kinds of different light sources, which makes it relatively hard for the average person to keep track of all of them.

So in the following section, we will try to explain exactly what light sources you will find on the market, and how to control and/or dim them.

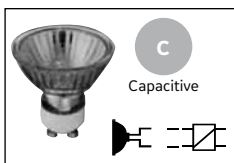
TYPES OF LAMPS



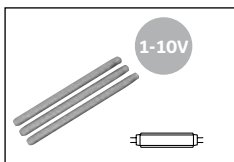
R – You mainly encounter resistance load with the ordinary lamp. The entire process works on the principle of heating a thin, usually tungsten filament, with an electric current running through it.



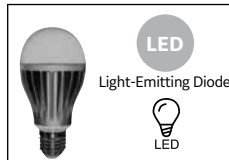
L – This is an inductive load mainly characteristic for low-voltage (12-24V) halogen lamps, which are controlled by a wound transformer, whose principle is the passage of voltage through the coil. By decreasing the voltage at the input, we in turn also change the value of the voltage at the output, which enables dimming.



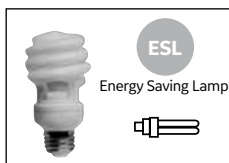
C – This is a capacity load mainly characteristic for energy-saving lamps, fluorescent or halogen lamps controlled by an electronic transformer. The principle is based on electrical ballast, which brightens or darkens the lamp. A dimmable transformer is used to dim.



1-10V - This type of regulation is conditional to so-called dimmable electrical ballast with input for 1-10V. Consequently, at this input, the product is connected with the output 1-10V (RFDA-71B, LBC3-22M), which enables brightness control within this range. This mostly concerns dimming tube fluorescent lamps.



LED – A Light-Emitting Diode (LED) is an electronic semiconductor component, which radiates a visible light. In the last few years, they have replaced the lamps in automobiles, streetlights and home appliances, and their popularity as active household illumination is constantly growing. The basis of the LED is the P-N junction. The actual LED chip is often connected with a cooler for efficient removal of waste heat away from the chip, and is covered by an epoxy capsule. This design makes LEDs highly mechanically resistant. It is even more effective than a compact fluorescent lamp - and is up to 15x more efficient than a classic incandescent lamp.



ESL – Energy saving lamp, often called a compact fluorescent lamp. In its design it is a capacity load, but for better separability of this type of light source, a special designation was created for it. The principle is a glass tube with heating electrodes filled with mercury vapors, in which the discharge occurs. This falls upon the walls of the tube covered with a lumino-phore - and the lamp illuminates. Disadvantages of this lamp are its sensitivity to frequent switching and the luminous flux that decreases over time.

Dimmers and type of lamps

Order codes	EAN code	R	L	C	ESL	LED		
		Standard light bulbs, halogen lamps	Low voltage lamps 12-24V wound transformers	Low voltage lamps 12-24V electronic transformers	Efficient dimmable fluorescent lamps	Category 1 Mostly "multiple LED" illumination sources power provided by LINEAR source limiting current (sharper dimming), lower price	Category 2 Sources that have 1-3 power LEDs, power provided by SWITCHING the source regulating brightness based on the input voltage (smoother dimming), higher price GU10 have higher body	Category 3 LED with DC and current regulation. Designed for dimming LED chips, LED strips, RGB LED
685997 DIM500RL230V Short press ON/OFF, pressing and holding dims, 500VA	5413656859970	X	X					
685998 DIM300UNI230V Dimmer for LED lamps and dimmable efficient fluorescent lamps, potentiometer brightness setting	5413656859987	X	X	X	X	X	X	
685999 DIMLC300UNI230V Dimmer maintaining and light intensity in Lx, including SKS photo-sensor	5413656859994	X	X	X	X	X	X	



DIN-rail dimmers

DIM

Features

- Low version dimmer only valid for resistive and halogen lamps
- Universal dimmer optimised for LED and CFL lighting, a new universal dimmers perfectly align to any DIN-rail installation.
- Thanks to the low width of 18mm only, the DIN dimmers are particularly suitable for retrofitting.
- The universal DIN-dimmers are the perfect choice for all buildings which demand individual and efficient lighting such as shops, restaurants or public areas.
- Universal dimmer with automatic lighting level control. Ideal to maintain the same light intensity in any site.

Functions

In the past, many different lamps required many different specific dimmers. So changing lamps often led to the situation that the installed dimmer could not control the new lamp without disturbances. Your customers thus faced humming and flickering lighting - and you were forced to choose the right dimmer from a more and more complicated offer.

Industrial Solutions has developed a universal dimmer module you can easily upgrade an installed push-button to future-proof dimmer. The dimmer is optimised to control LED and reliably dims other loads as well. Installed in a switchboard, on a DIN-rail, they can be controlled by several push-buttons.

Applications



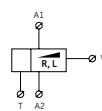
DIM dimmers are designed to adjust light intensity to your needs. They are particularly intended for the residential and tertiary sectors, for example to light conference rooms, cinemas, restaurants and shops.

Nowadays, there are a lot of lighting sources and of course, for a layman, it is really hard to understand which one is the best. Dimming can save up to 20% of your energy bills. Moreover, dimming can create the right atmosphere for party, reading a book or watching a movie...

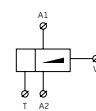
Marking



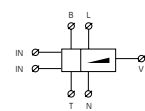
Wiring



RL dimmer



Universal dimmer



Universal dimmer with automatic lighting level control

Performance

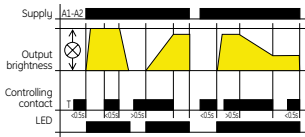
Load	lamp, halogen light	low-voltage el. bulbs 12-24V wound trans.	low-voltage el. bulbs 12-24V el. transformers	LED bulbs	saving fluorescent lamps	switching management	
	HAL230V R	L	C	230V AC dimmable	dimmable	incline edge	descending edge
DIM 500 RL 230V	•	•	X	X	X	•	X
DIM 300 UNI 230V	•	•	•	•	•	•	•
DIM LC 300 UNI 230V	•	•	•	•	•	•	•

DIM DIN-rail dimmers



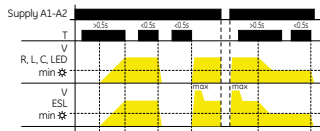
Dimmed load	Type of lamps	Output	Control by	Nominal voltage AC	Voltage tolerance	No. of mod.	Cat. No.	Ref. No. Pack
RL dimmer								
R: 10...500VA L: 10...250VA	R, L	2A	Push-button	230V/ 50Hz	-15%..+10%	1	DIM500RL230V	685997 1
Universal dimmer								
300W ($\cos \varphi = 1$) ⁽¹⁾	R, L, C, LED, ESL	2xMOSFET	Push-Button	230V/ 50Hz	-15%..+10%	1	DIM300UNI230V	685998 1
Universal dimmer with automatic lighting level control								
300W ($\cos \varphi = 1$) ⁽¹⁾	R, L, C, LED, ESL	2xMOSFET	Push-button & Light sensitive photocell	230V/ 50Hz-60Hz	-15%+15%	1	DIMLC300UNI230V	685999 1

(1) Due to a large number of light source types, the maximum load depends on the internal construction of dimmable LEDs and ESL bulbs and their power factor $\cos \varphi$. The power factor of dimmable LEDs and ESL bulbs ranges from $\cos \varphi = 0.95$ to 0.4 . An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.



RL dimmer

- short press for switch on/off the lamp, longer press (> 0.5 s) for fluent illumination regulation
- when a device is de-energized, the brightness level is stored in its memory. When the device is energized again, a light is off. You can switch this light on by pressing a button. The light then switches on in the brightness level which is stored in its memory.



Universal dimmer

Controlling

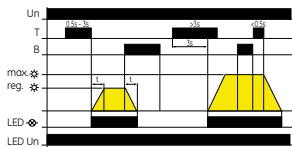
- short button press (< 0.5 s) turns the light off or on
- long press (> 0.5 s) enables slight regulation of light intensity
- setting of minimal luminance is possible only during decreasing of luminance by long button press
- setting of minimal luminance by saving fluorescent lamps serves for harmonizing of lowest light intensity prior its unprompted switching off

Luminance setting

- R, L, C, LED - if the light is turned off, short press (< 0.5 s) switches the light onto last set luminance level
- ESL - if the light is turned off, short press increases the luminance onto maximal level (saving fluorescent lamps fires up) and then luminance decreases onto set level.

Notice

- it is not possible to dim saving fluorescent lamps without marking: dimmable
- an incorrect setting of light source has effect only on dimming range, it means neither dimmer or load get damaged
- The maximum number of dimmable light sources depends on their internal construction



Universal dimmer with automatic lighting level control

T-button control

- pressing button shortly (< 0.5 s) always turns of lamp
- pressing button longer ($0.5... 3$ s) turns on lamp in automatic regulation mode
- pressing button long (> 3 s) turns on lamp to full illumination - „cleaner“ mode
- after turning on the power supply, the dimmer is always turned off

Thyristor B

serves to block automatic regulation (lamp turns off)
WARNING! The lamp may be turned on in “cleaner” mode even while blocked.
 After ending block mode, the lamp remains off.

Control elements on the instrument panel

- load switch - has 2 positions for each type of load that differ in their regulation curves (sets the best position for the connected load)
- the lamp turns off (if previously on) whenever the switch settings are changed
- potentiometer setting of minimal luminance
- potentiometer setting of desired lighting level during automatic regulation
- the potentiometer status is stored in short-term memory whenever a change occurs - a green LED flashes (approx. 3s) while storing
- both lighting levels are storing in EEPROM memory during a power supply failure - LED meanwhile briefly turns off

WARNING!

- both lighting levels must be reset when switching Load type
- both lighting levels may only be set in automatic mode while the lamp is on
- potentiometer setting of lighting level fade speed - only available in automatic regulation mode
- determines the reaction time to changes in surrounding lighting level



Comfort Functions

Modular DIN-rail devices

Technical data dimmers

	DIM500RL230V	DIM300UNI230V	DIMLC300UNI230V
Supply			
Supply terminals	A1-A2		L-N
Supply voltage	AC 230V / 50Hz		AC 230V / 50-60Hz
Supply voltage tolerance	-15%; +10%		-15%; +10%
Consumption	max. 5 VA	max. 1.5 VA/0.7W	max. 1.6 VA/0.8W
Supply indication	Green LED		
Controlling			
Button - control. terminals	T-A1		L-T
Control voltage	AC 230V		
Control input power	max. 1.5VA	AC 0.3-0.6VA	max. 0.6VA
Control impulse length	min. 80ms / max. unlimited		
Glow tubes connection	YES		
Maximum number of connected glow lamps the control input	max. 15 pcs (measured with glow lamp 0.68mA/230V AC)		230V - max.count 50ks (measured with glow 0.68mA/230V AC)
Blocking input - terminals	-		
Control voltage	-		
Consumption	-		
Connect glow-lamps (terminals L - B)	-		
Impulse length	-		
Output			
Output type	2A	2 x MOSFET	
Output status indication	red LED		
Load capability	R: 10 - 500VA; L: 10 - 250VA	300W (at $\cos \varphi = 1$) ⁽¹⁾	
Other data			
Operating temperature	-20... +55°C	-20... +35°C	
Storing temperature	-30... +70°C	-20... +60°C	
Operating position	any	vertical	
Mounting	DIN-rail EN 60715		
Protection degree	IP40 from front panel, IP10 terminals		
Overvoltage category	III.		
Pollution level	2		
Max. cable size	max. 2 x 2.5; max. 1 x 4 s/with carven max. 1 x 2.5; max. 2 x 1.5		
Dimensions	90 x 17.6 x 64mm		
Weight (g)	58	57	
Applying standards	EN 60669-2-1; EN 61010-1		

(1) Due to a large number of light source types, the maximum load depends on the internal construction of dimmable LEDs and ESL bulbs and their power factor $\cos \varphi$. The power factor of dimmable LEDs and ESL bulbs ranges from $\cos \varphi = 0.95$ to 0.4. An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

New electromechanical time switches

Complete range of possibilities

- 1, 2, 2.5 modules
- With and without battery
- Daily (Grey trippers), weekly (Yellow trippers) timers
- Shortest switch time: 15 minutes or 30 minutes models
- Normally Open and Changeover contacts





New SIMPLE digital time and astronomical switches

GLX+Q 30 Time switch

The perfect combination of the precision of digital time switch and the simplicity of the electromechanical one.

- Display clarity, simplicity in the 3 keys
- Replaceable backup battery through the rear cover on the back

Use

- Gardens lighting, courtyards, alleys, ...
- Opening gates, doors, ...



Electric utilities management throughout the day

- Desired program setting with simple ON/OFF of the virtual trippers lasting 30 minutes each
- All performed programming is immediately viewable on the display
- 1 program for everyday or 7 programs, one for each day of the week (weekly version of the instrument)
- Automatic summer/winter time change
- The instrument is supplied with already set time and date

Astronomical switch

- Automatic programming of switching on (at sunset) and switching off (at sunrise)
- Possibility of night switching off with OFF virtual trippers
- Automatic summer/winter time change
- The instrument is supplied with already set time and date

Use

- Shops, shop windows, ...
- Roads, parks, fountains, ...
- Illuminated signs, monuments, ...



New digital time and astronomical switches

GLX+Q 1

Digital time switches 2 DIN-modules to manage electrical utilities in time with the maximum precision. The available models permit to make daily, weekly, monthly and yearly programs with 1 of 2 channels.

Electronic time switch that combines the functionality of astronomical (channel 2) and digital switch (channel 1)



Digital time switch 3 DIN-modules with add on power contacts module and software to program remotely or through IR interface

New light sensitive switches

CHARATERISTICS

- Compact form of the cover
- Adjusting method of the intervention threshold (which occurs via trimmer without the need to open the device)





Classic Plus



Applications



Going from the pre-programmed switching of lighting (car park, advertising signs, public roads, etc.) over pre-programmed switching of heating equipment (home and work-environment, waterheating, etc.), to the pre-programmed switching of motors for pumps and fans and even to presence simulation.

Features

Going from the pre-programmed switching of lighting (car park, advertising signs, public roads, etc.) over pre-programmed switching of heating equipment (home and work-environment, waterheating, etc.), to the pre-programmed switching of motors for pumps and fans and even to presence simulation.

Functions

Pre-programmed switching of all kinds of electrical devices

Standards / Marking








VDE 0633, BS EN 60730-1, BS EN 60730-2-7



Performance

	Plastic switches					
	NET SYNCHRONISED			QUARTZ SYNCHRONISED		
	1 module	2 modules	2.5 modules	1 module	2 modules	2.5 modules
Contact	Voltage free NO	Voltage free CO	Voltage free CO	Voltage free NO	Voltage free CO	Voltage free CO
Fix on, Fix off, Auto switch	yes	yes	yes	yes	yes	yes
Rated switching capacity						
- Resistive load	16A/250V	16A/250V	16A/250V	16A/250V	16A/250V	16A/250V
Connectable Loads						
- Incandescent	2500W	3000W	3000W	2500W	3000W	3000W
- Fluorescent (neon)	1200VA	1200VA	1200VA	1200VA	1200VA	1200VA
- Low voltage halogen	2000VA	2000VA	2000VA	2000VA	2000VA	2000VA
- Halogen (230V)	2500W	3000W	3000W	2500W	3000W	3000W
- Low consumption (CFL)	900VA - 1000VA	900VA - 1000VA	900VA - 1000VA	900VA - 1000VA	900VA - 1000VA	900VA - 1000VA
- Led	100VA	1000VA	1000VA	100VA	1000VA	1000VA
Shortest switching time day-program	15 min.	30 min.	15 min.	15 min.	30 min.	15 min.
Shortest switching time week-program	-	-	-	-	210 min.	120 min.
Screws	Pozidriv1	Pozidriv1	Pozidriv1	Pozidriv1	Pozidriv1	Pozidriv1
Terminal capacity: min	1mm ²	1mm ²	1mm ²	1mm ²	1mm ²	1mm ²
max	4mm ²	4mm ²	4mm ²	4mm ²	4mm ²	4mm ²
Clockwork						
Operating voltage	230 V AC(-15%...+10%)	230 V AC(-15%...+10%)	230 V AC(-15%...+10%)	230 V AC(-15%...+10%)	230 V AC(-15%...+10%)	230 V AC(-15%...+10%)
Own consumption at 230V	0.5W	0.5W	0.5W	0.5W	0.5W	0.5W
Running reserve	-	-	-	150h	150h	150h
Battery charging time	-	-	-	120h	96h	96h
Operating temperature range	-10 °C ... +50°C	-10 °C ... +50°C	-10 °C ... +50°C	-10 °C ... +50°C	-10 °C ... +50°C	-10 °C ... +50°C
Accuracy	±1s/24h at 25°C	±1s/24h at 25°C	±1s/24h at 25°C	±1s/24h at 25°C	±1s/24h at 25°C	±1s/24h at 25°C
Sealable	yes	yes	yes	yes	yes	yes

Classic Plus - Analogue time switches

	Program	No. of channels	Nominal Current	Running reserve	Shortest switch time	Fix on/off auto	No. of mod.	Cat. No.	Ref. No.	Pack.	
NET SYNCHRONISED Day programmable 	Operating Voltage: 230 V AC(-15%...+10%)										
	1x24x4	1NO	16A/250Vac	-	15min.	yes	1	CLS+S 15 1NA 16A 1M D	687436	1	
	1x24x2	1CO	16A/250Vac	-	30min.	yes	2	CLS+S 30 1COM 16A 2M D	687438	1	
	1x24x4	1CO	16A/250Vac	-	15min.	yes	2.5	CLS+S 15 1COM 16A 2.5M D	687441	1	
	 1NO		 1CO								
QUARTZ SYNCHRONISED Day programmable 	Operating Voltage: 230 V AC(-15%...+10%)										
	1x24x4	1NO	16A/250Vac	150h	15min.	yes	1	CLS+Q 15 1NA 16A 1M D	687437	1	
	1x24x2	1CO	16A/250Vac	150h	30min.	yes	2	CLS+Q 30 1COM 16A 2M D	687439	1	
	1x24x4	1CO	16A/250Vac	150h	15min.	yes	2.5	CLS+Q 15 1COM 16A 2.5M D	687442	1	
	 1CO										
QUARTZ SYNCHRONISED Week programmable 	Operating Voltage: 230 V AC(-15%...+10%)										
	7x24/3.5	1CO	16A/250Vac	150h	210min.	yes	2	CLS+Q 210 1COM 16A 2M W	687440	1	
	7x24/2	1CO	16A/250Vac	150h	120min.	yes	2.5	CLS+Q 120 1COM 16A 2.5M W	687443	1	
	 1CO										



Galax Plus

Modular DIN-rail devices



Applications



Going from the pre-programmed switching of lighting (car park, advertising signs, public roads, etc.) over pre-programmed switching of heating equipment (home and work environment, water heating, etc.), to the pre-programmed switching of motors for pumps and fans and even to random presence simulation.

Standards

BS EN-60730-1, BS EN-60730-2-7, VDE 0633

Performance

	DAY/WEEK PROGRAMMABLE		DAY/WEEK/MONTH/YEAR	
	1 module	2 modules	DW	BUS
Contact	Voltage free NO	Voltage free CO	Voltage free CO	Voltage free NO
Rated switching capacity				
- Resistive load	16A/250 VAC	16A/250 VAC	16A/250 VAC	16A/250 VAC
Connectable Loads				
- Incandescent 240V	1500W	1500W	1500W	1500W
- Fluorescent (neon)	600W	600W	600W	600W
- Halogen (230V)	1500W	1500W	1500W	1500W
Minimum switching load	100mA/5 VDC	100mA/5 VDC	100mA/5 VDC	100mA/5 VDC
DC switching capacity	16A/24 VDC	16A/24 VDC	16A/24 VDC	16A/24 VDC
Shortest switching time	30 min	30 min	1 min	1 min
Screws	PH	PH	PH	PH
Terminal capacity:	1-4mm ²	1-6mm ²	1-6mm ²	1-6mm ²
Clockwork				
Operating voltage	230V AC(-15%...+10%)	230V AC(-15%...+10%)	230V AC(-10%...+10%)	230V AC(-15%...+10%)
Own consumption at 230V	6VA (1W)	5.5VA (1W)	8VA (2W)	7VA (2.6W)
Operating temperature range	-20°C...+50°C	-20°C...+50°C	-20°C...+50°C	-20°C...+50°C
Accuracy	± 1 second/day at 25°C	± 1 second/day at 25°C	± 1 second/day at 25°C	± 0.5 second/day at 25°C
Sealable	no	no	yes	yes

Features

Very easy programming, with quasi unlimited possibilities compared to the analogue time switches. Devices with daily, weekly and yearly event programming possibilities are available in 1, 2 up to 8 channel execution. All devices have a shortest switching time of one minute. On all devices, the summer/winter time change is fully automatic. Devices with block-programming,

Functions

Pre-programmed switching of all kinds of electrical devices

Galax Plus - Digital time switches



	Program	No. of channels	Switching capacity	Running reserve	Shortest switch time	No. of modules	Cat. No.	Ref. No.	Pack.
QUARTZ SYNCHRONISED	Operating Voltage: 230V AC(-15%...+10%)								
Day programmable	1x24x2	1CO	16A (10) at 250V AC	5 years	30 min	2	GLX+Q 30 1COM 16A 2M D ANA	687447	1
Astro programmable	1x24x2	1CO	16A (10) at 250V AC	5 years	30 min	2	GLX+Q AST30 1NA 16A 2M D ANA	687449	1
Week programmable	7x24h/0.5	1CO	16A (10) at 250V AC	5 years	30 min	2	GLX+Q 30 1COM 16A 2M W ANA	687448	1



For day/week timers

- Power supply: 230V 50/60Hz
- Daily or weekly versions
- Switching of the relay only in presence of power supply
- Manual override of the relay (temporary or permanent)
- Summer time automatic update
- Date and time already default set
- Backup battery for maintaining the date and time without power from the mains
- Low battery signal
- Password protected lock keypad
- Backlighting always on when instrument is mains powered (auto power off for energy saving in the case of blackout)
- 48 virtual trippers for a resolution of 30 minutes

For Astro Timers

- Available programming:
 - P1 fixed with possibility of night-switch ON/OFF of minimum 30 minutes
 - Sunrise and sunset hours are calculated according to phone prefix or geographical coordinates
 - Display of the sunset/sunrise times calculated by the device
 - Update of sunrise/sunset hours: ±120 minutes
 - Summertime automatic update
- Manual override of the relay (temporary or permanent)
- Relay switching only with power supply
- Depleted battery signaling

Galax Plus - Digital time switches



	Program	No. of channels	Switching capacity	Running reserve	Shortest switch time	No. of modules	Cat. No.	Ref. No.	Pack.
QUARTZ SYNCHRONISED	Operating Voltage: 230V AC(-15%...+10%)								
Day programmable	1x24x4	1NO	16A (10) at 250V AC	4 years	30 min	1	GLX+Q 30 1NA 16A 1M D	687444	1
Astro programmable	1x24x4	1NO	16A (10) at 250V AC	4 years	30 min	1	GLX+Q 30 1NA 16A 1M AST D	687446	1
Week programmable	1x24x2	1NO	16A (10) at 250V AC	4 years	30 min	1	GLX+Q 30 1NA 16A 1M W	687445	1



For day/week timers

- Power supply: 230V 50/60Hz
- Daily or weekly versions
- Switching of the relay only in presence of power supply
- Manual override of the relay (temporary or permanent)
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 - Update of sunrise/sunset hours: ±120 minutes
 - Summertime automatic update
- Manual override of the relay (temporary or permanent)
- Relay switching only with power supply
- Depleted battery signaling



Comfort Functions

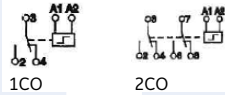
Modular DIN-rail devices

Galax Plus - Digital time switches



QUARTZ SYNCHRONISED With no IR interface

Program	No. of channels	Switching capacity	Running reserve	Shortest switch time	No. of modules	Cat. No.	Ref. No.	Pack.
Operating Voltage: 230V AC(-10%...+10%)								
7x24x60	1CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 1COM 16A 2M DW	687450	1
7x24x60	2CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 2COM 16A 2M DW	687451	1
With IR interface								
7x24x60	1CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 1COM 16A 2M DW IR	687452	1
7x24x60	2CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 2COM 16A 2M DW IR	687453	1
ASTRO								
7x24x60	1CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 1COM 16A 2M AST IR	687454	1
7x24x60	2CO	16A (10) at 250V AC	3 years	1 min	2	GLX+Q 1 2COM 16A 2M AST IR	687455	1
remote Infrared control								
-	-	2x1.5V (AAA type batteries)	-	-	-	GLX+IR	687456	1



For day/week timers

- Power supply: 230V 50/60Hz
- Version: 1 or 2 channels
- Switching of the relay only in presence of power supply
- Manual override of the relay (temporary or permanent)
- Program: ON, OFF, CYCLE, PULSE (1...9 seconds) HOLIDAY, RANDOM
- Maximum storable programs for each channel:
 - 30 events (on, off, cycle, pulse)
 - 4 holiday periods (period = more consecutive days)
 - 20 holiday days (single days)
- Integrated infrared interface (only available in GLX+Q DW IR)
- Password protected lock keypad
- Display automatically shuts-off after 3 minutes of inactivity of the keyboard

For Astro Timers

- Available programming:
 - P1 fixed and not modifiable
 - Only for GLX Q 2COM: 6 programs on output 1
- Maximum holiday events for each channel: 4 periods + 20 days
- Display of the sunset/sunrise times calculated by the device
- Update of sunrise/sunset hours: ±120 minutes
- Summertime automatic update
- Manual override of the relay (temporary or permanent)
- Relay switching only with power supply
- Depleted battery signaling
- Integrated infrared interface

For GLX+IR

- Charge reserve for battery replacement: 2 minutes
- Viewing with display LCD (non-backlit)
- Text guide
- Available languages: English/Italian/Spanish/French/German
- Maximum number of programs that can be stored: 126

Galax Plus - Digital time switches



QUARTZ SYNCHRONISED

Program	No. of channels	Switching capacity	Running reserve	Shortest switch time	No. of modules	Cat. No.	Ref. No.	Pack.
Operating Voltage: 230V AC(-10%...+10%)								
365x24x60	1CO	16A (10) at 250V AC	5 years	1 min	3	GLX+Q 1 1COM 16A 3M Y BUS	687464	1
Operating Voltage: 230V AC (-15%...+10%)								
-	4CO	8A (5) at 250V AC	-	-	4	GLX+Q 4COM 8A 4M BUS	687466	1
Operating Voltage: 12V DC(-20%...+20%)								
GEOBUS						GLX+ GEO BUS	687465	1



For day/week/month/year timers

- Time programming (D/W/M/Y) or astronomical programming
- Available programs: on/off, on pulse, on holiday, off holiday, random, night (astronomical)
- Independent channels to control 9 loads (relays):
 - 1 relay on board of the device
 - 8 relays to be realized by connecting two actuators
- Maximum number of storable programs: 450 (900 events) allocable on 9 channels
- Possibility to automatically capture date, time and geographical position connecting GEO BUS
- Manual override of the relay (temporary or permanent)
- Possibility to copy:
 - The programs of a channel on other channels
 - All programs from another GLX+Q BUS connected
- Password protected lock keypad
- Automatic time update (DST)
- Menu in five languages: English/Italian/Spanish/French/German

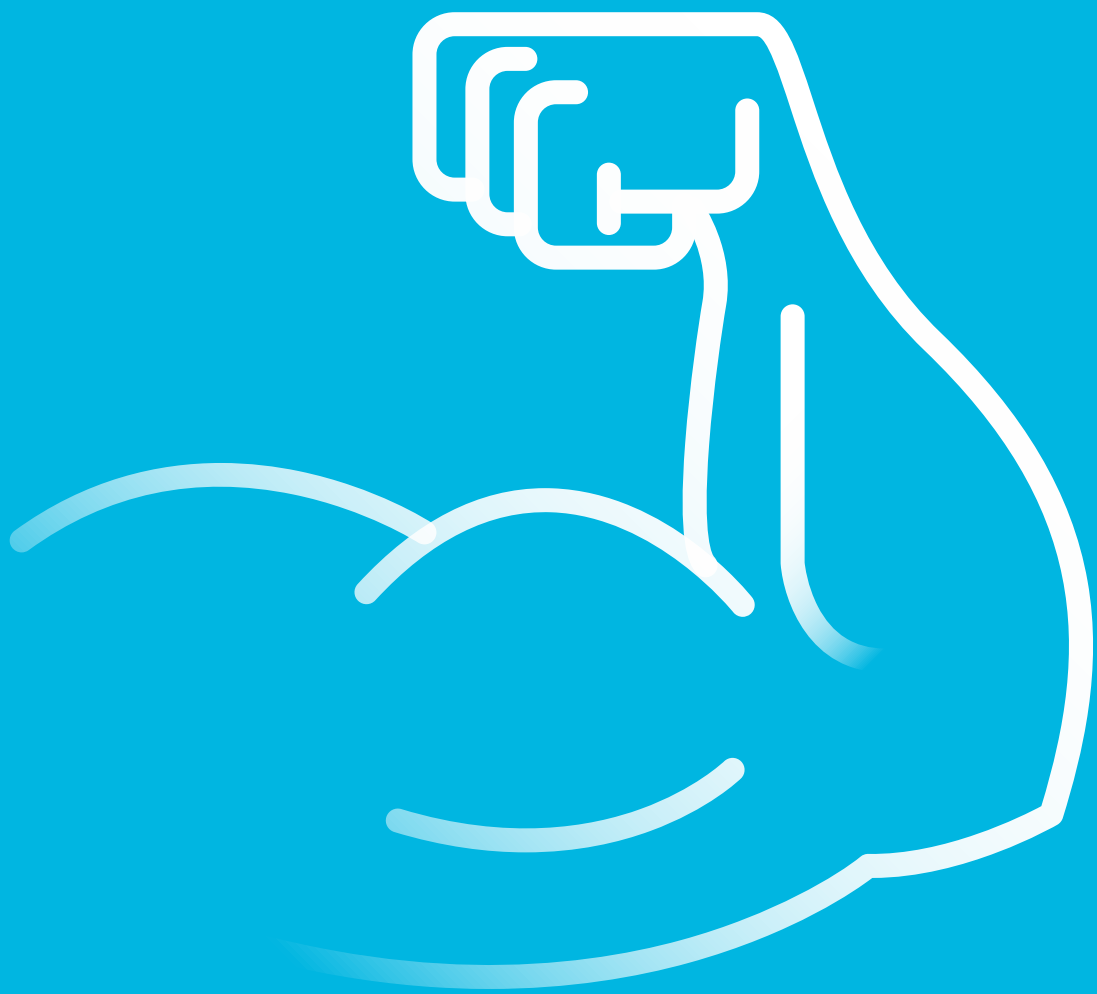
For Receiver:

- Power supply: 230V AC (-15%...+10%), 50/60Hz
- Output: 4 bistable relays with change-over contact from 8A (250V AC)

GLX+ GEO BUS

Is a GPS module that allows you to capture the information of date, time and position from satellites. This information will be shared with GLX+Q BUS







Time Switches

72 x 72 Classic Plus and Galax Plus



Applications



Going from the pre-programmed switching of lighting (car park, advertising signs, public roads, etc.) over pre-programmed switching of heating equipment (home and work environment, water heating, etc.), to the pre-programmed switching of motors for pumps and fans and even to random presence simulation.

Standards

EN 60780-1, EN 60780-2-7

Performance

	DAY PROGRAMMABLE	WEEK PROGRAMMABLE	DAY/WEEK PROGRAMMABLE
Contact	switched	switched	changeover
Maximum recommended load			
- Incandescent lamps	3000W	3000W	3000W
- Fluorescent with compensation	1200VA	1200VA	-
- Low voltage halogen lamps	2000VA	2000VA	2000VA
- Halogen (230V AC)	3000W	3000W	3000W
- Low consumption lamps	1000VA	1000VA	1000VA
- Downlight lamps	900VA	900VA	-
- LEDs	1000VA	1000VA	1000VA
- Non-compensated	-	-	1200VA
Running reserve	>100h	>100h	5 years
Shortest switching time	15 min	2 h	1 min
Modules	4	4	4
Nominal current	16A/250 VAC	16A/250 VAC	16A/250 VAC
Accuracy	± 1 second/day at 25°C	± 1 second/day at 25°C	± 1 second/day at 25°C
Number of channels	1	1	1
Operating voltage	230V AC	230V AC	230V AC
Fix on/off auto	yes	yes	yes
Own consumption at 230V	1.8W	1.8W	6VA
Operating temperature range	0°C...55°C	-10°C...+45°C	-10°C...+45°C
Flush mounting	yes	yes	yes
Surface mounting	yes	yes	yes
Number of memory position	-	-	50

Features




Very easy programming by means of mechanical switches or digital buttons. Devices with daily and weekly event programming possibilities. Analogue devices have a shortest switching time of 15 minutes and digital device has 1 minute.

Functions

Pre-programmed switching of all kind of electrical devices.



72 x 72 Classic Plus - Analogue time switches

	Program	No. of channels	Nominal Current	Running reserve	Shortest switch time	Fix on/off auto	No. of modules	Cat. No.	Ref. No.	Pack.	
	Operating Voltage: 120 or 230V AC										
	Day program	1x24	1CO	16A/250 VAC	>100h	15 min	yes	4	CLS+Q 15 1COM 16A 72x72 D	687467	1
	Operating Voltage: 120 or 230V AC - 24 or 48V AC/DC										
	Week program	7x24	1CO	16A/250 VAC	>100h	2 h	yes	4	CLS+Q 15 1COM 16A 72x72 W	687468	1
	Operating Voltage: 120 or 230V AC - 24 or 48V AC/DC										
	Day/Week program	1x24/7x24	1CO	16A/250 VAC	5 years	1min	yes	4	GLX+Q 15 1COM 16A 72x72 W	687469	1



Galax LSS



Applications



Control of lighting in shop windows, offices, car parking areas, controlling street lights, advertising signs, sun blinds, shutters, or even lighting in a home to simulate the presence of people.

Standards

VDE 0632, VDE 0633, EN 60669-2-1

Features

User presettable switch light intensity, intensity range and hysteresis (to avoid on/off a stable behavior). Reaction time is also user presettable. 1 channel and 2 channel with week-cycle, all with separate photocell are available besides a 1 channel all-in-one device.

Functions










Electronic switch controlled by the intensity of the ambient light, detected by a separate or integrated photocell (depending on the model). When the light intensity drops below the threshold setting, the switch changes its state to the on position. An increasing ambient light intensity eventually will switch off the device again.

Performance

	GLX+Q LUX 1NA 1 module 1 NO	GLX+Q LUX/T1COM 2 module 1 relay in monostable change over	GLX+ LUX WALL Relay with NO contact
Contact			
Switching capacity			
- Resistive load	16A/250 VAC	16A/250 VAC	10A/230 VAC
Connectable Loads			
- Incandescent Lamps	4000W	4000W	4000W
- Fluorescent Lamps	1000W	1000W	1000W
- LED <2W/2-8W/ >8W	55/150/180W	55/150/180W	55/150/180W
DC switching capacity	16A/24VDC	16A/24VDC	16A/24VDC
Shortest switching time	20 sec	1 min	10 sec
Screws	PH	PH	PH
Terminal capacity:			
max	4mm ²	6mm ²	4mm ²
min	1mm ²	1mm ²	1mm ²
Operating voltage	230V AC (-20%...+10%)	230V AC (-10%...+10%)	230V AC (-10%...+10%)
Own consumption at 230V	6VA (1W)	8VA (2W)	8VA (1W)
Running reserve	-	3 years	-
Battery	-	Lithium	-
Operating temperature range	-0°C...+50°C	-20°C...+50°C	-0°C...+50°C
Accuracy	-	± 1 second/day at 25°C	± 1 second/day at 25°C
Sealable	-	yes	-
Light sensitive operating part			
Light intensity switching range	10 to 100 lux	5 to 500 lux	3 to 70 lux
Switching hysteresis	0	1 to 50% threshold	4
On/Off switching delay	15s ON 15s OFF	1-50min (programmable) 1-50min (programmable)	15s 15s
Light sensitive sensor wire-length	max. 100m	max. 50m	-
Light sensitive sensor protection degree	IP65	IP65	IP54
Operating temperature range	-20°C...+50°C	-20°C...+50°C	-0°C...+50°C



Galax LSS

	Program	No. of channels	Nominal Current	No. of modules	Cat. No.	Ref. No.	Pack.
 	Operating Voltage: 230V AC (-20%...+10%) 10 to 100 lux	1NO	16A/250 VAC	1	GLX+Q LUX 1NA 16A 1M	687470	1
							
 	Operating Voltage: 230V AC (-10%...+10%) 5 to 500 lux	1CO	16A/250 VAC	2	GLX+Q LUX/T1COM16A2M	687472	1
							
	Sensor for GLX+ QLUX	-	-	-	GLX+LSS EXT	687471	1
 	Operating Voltage: 230V AC (-10%...+10%) 3 to 70 lux	1NO	10A	-	GLX+ LUX WALL	687473	1
							

GLX LSS



Comfort Functions

By reference number

Modular DIN-rail devices

Ref. No.	Cat. No.	Page
661000		
661692	ASTBLR230	3
661693	ASTBLG230	3
661694	ASTBLB230	3
661695	ASTBLY230	3
685000		
685693	CONTAXR1610008A	7
685694	CONTAXR1610012A	7
685695	CONTAXR1610024A	7
685696	CONTAXR1610048A	7
685697	CONTAXR1610115A	7
685699	CONTAXR1610230A	7
685700	CONTAXR1610240A	7
685701	CONTAXR161008A	7
685702	CONTAXR161012A	7
685703	CONTAXR161024A	7
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685705	CONTAXR161115A	7
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685707	CONTAXR161240A	7
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685712	CONTAXR1620115A	7
685714	CONTAXR1620230A	7
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685807	PULSAR1611230A	12
685808	PULSAR161123060	12
685809	PULSAR1611240A	12
685810	PULSAR162008A	12
685811	PULSAR162012A	12
685812	PULSAR162024A	12

Ref. No.	Cat. No.	Page
685813	PULSAR162048A	12
685814	PULSAR162115A	12
685815	PULSAR162230A	12
685816	PULSAR162240A	12
685817	PULSAR3210008A	12
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685863	PULSAR3220024A	13
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685865	PULSAR3220240A	13
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685880	PULSARAU20	13
685881	PULSARC	13
685882	PULSARM	13
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685884	PULSARCAMP	13
685885	PULSARCAP	13
685930	CONTAXRAUX20	7
685934	CONTAXR2CAP	7
685945	CONTAXR1CAP	7
685993	PLT+MF230V16A1CO	21
685994	PLT+MFUNI16A1CO	21
685995	PLT+MFUNI8A3CO	21
685996	PLT+ASUNI16A1CO	21
685997	DIM500RL230V	25
685998	DIM300UNI230V	25
685999	DIMLC300UNI230V	25
686000		
686069	PLC/CTX SP	13
687000		
687436	CLS+S 15 1NA 16A 1M D	31
687437	CLS+Q 15 1NA 16A 1M D	31
687438	CLS+S 30 1COM 16A 2M D	31
687439	CLS+Q 30 1COM 16A 2M D	31
687440	CLS+Q 210 1COM 16A 2M W	31

Ref. No.	Cat. No.	Page
687441	CLS+S 15 1COM 16A 2.5M D	31
687442	CLS+Q 15 1COM 16A 2.5M D	31
687443	CLS+Q 120 1COM 16A 2.5M W	31
687444	GLX+Q 30 1NA 16A 1M D	33
687445	GLX+Q 30 1NA 16A 1M W	33
687446	GLX+Q 30 1NA 16A 1M AST D	33
687447	GLX+Q 30 1COM 16A 2M D ANA	33
687448	GLX+Q 30 1COM 16A 2M W ANA	33
687449	GLX+Q AST30 1NA 16A 2M D ANA	33
687450	GLX+Q 1 1COM 16A 2M DW	34
687451	GLX+Q 1 2COM 16A 2M DW	34
687452	GLX+Q 1 1COM 16A 2M DW IR	34
687453	GLX+Q 1 2COM 16A 2M DW IR	34
687454	GLX+Q 1 1COM 16A 2M AST IR	34
687455	GLX+Q 1 2COM 16A 2M AST IR	34
687456	GLX+ IR	34
687464	GLX+Q 1 1COM 16A 3M Y BUS	34
687465	GLX+ GEO BUS	34
687466	GLX+Q 4COM 8A 4M BUS	34
687467	CLS+Q 15 1COM 16A 72x72 D	37
687468	CLS+Q 15 1COM 16A 72x72 W	37
687469	GLX+Q 15 1COM 16A 72x72 W	37
687470	GLX+Q LUX 1NA 16A 1M	39
687471	GLX+LSS EXT	39
687472	GLX+Q LUX/T1COM16A2M	39
687473	GLX+ LUX WALL	39
687474	PULSAR SC 1-15 16A 1M	14



Cat. No.	Ref. No.	Page
A...		
ASTBLB230	661694	3
ASTBLG230	661693	3
ASTBLR230	661692	3
ASTBLV230	661695	3
C...		
CLS+Q 120 1COM 16A 2.5M W	687443	31
CLS+Q 15 1COM 16A 2.5M D	687442	31
CLS+Q 15 1COM 16A 72x72 D	687467	37
CLS+Q 15 1COM 16A 72x72 W	687468	37
CLS+Q 15 1NA 16A 1M D	687437	31
CLS+Q 210 1COM 16A 2M W	687440	31
CLS+Q 30 1COM 16A 2M D	687439	31
CLS+S 15 1COM 16A 2.5M D	687441	31
CLS+S 15 1NA 16A 1M D	687436	31
CLS+S 30 1COM 16A 2M D	687438	31
CONTAXR1610008A	685693	7
CONTAXR1610012A	685694	7
CONTAXR1610024A	685695	7
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CONTAXR1610115A	685697	7
CONTAXR161012A	685702	7
CONTAXR1610230A	685699	7
CONTAXR1610240A	685700	7
CONTAXR161024A	685703	7
CONTAXR161048A	685704	7
CONTAXR1611008A	685716	7
CONTAXR1611012A	685717	7
CONTAXR1611024A	685718	7
CONTAXR1611048A	685719	7
CONTAXR1611115A	685720	7
CONTAXR161115A	685705	7
CONTAXR1611230A	685722	7
CONTAXR1611240A	685723	7
CONTAXR161230A	685706	7
CONTAXR161240A	685707	7
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CONTAXR1640012A	685736	7
CONTAXR1640024A	685737	7
CONTAXR1640048A	685738	7
CONTAXR1640230A	685740	7
CONTAXR1640240A	685741	7
CONTAXR1CAP	685945	7
CONTAXR2CAP	685934	7
CONTAXRAUX11	685883	7
CONTAXRAUX20	685930	7
D...		
DIM300UNI230V	685998	25
DIM500RL230V	685997	25
DIMLC300UNI230V	685999	25
G...		
GLX+ GEO BUS	687465	34
GLX+ IR	687456	34
GLX+ LUX WALL	687473	39
GLX+LSS EXT	687471	39
GLX+Q 1 1COM 16A 2M AST IR	687454	34
GLX+Q 1 1COM 16A 2M DW	687450	34
GLX+Q 1 1COM 16A 2M DW IR	687452	34
GLX+Q 1 1COM 16A 3M Y BUS	687464	34
GLX+Q 1 2COM 16A 2M AST IR	687455	34
GLX+Q 1 2COM 16A 2M DW	687451	34
GLX+Q 1 2COM 16A 2M DW IR	687453	34
GLX+Q 15 1COM 16A 72x72 W	687469	37
GLX+Q 30 1COM 16A 2M D ANA	687447	33
GLX+Q 30 1COM 16A 2M W ANA	687448	33
GLX+Q 30 1NA 16A 1M AST D	687446	33

Cat. No.	Ref. No.	Page
GLX+Q 30 1NA 16A 1M D	687444	33
GLX+Q 30 1NA 16A 1M W	687445	33
GLX+Q 4COM 8A 4M BUS	687466	34
GLX+Q AST30 1NA 16A 2M D ANA	687449	33
GLX+Q LUX 1NA 16A 1M	687470	39
GLX+Q LUX/T1COM16A2M	687472	39
P...		
PLC/CTX SP	686069	13
PLT+ASUNI16A1CO	685996	21
PLT+MF230V16A1CO	685993	21
PLT+MFUNI16A1CO	685994	21
PLT+MFUNI8A3CO	685995	21
PULSAR SC 1-15 16A 1M	687474	14
PULSAR1610008A	685779	12
PULSAR1610012A	685780	12
PULSAR1610024A	685781	12
PULSAR1610048A	685782	12
PULSAR161008A	685787	12
PULSAR1610115A	685783	12
PULSAR161012A	685788	12
PULSAR1610230A	685784	12
PULSAR1610240A	685786	12
PULSAR161024A	685789	12
PULSAR161048A	685790	12
PULSAR1611008A	685802	12
PULSAR1611012A	685803	12
PULSAR1611024A	685804	12
PULSAR1611048A	685805	12
PULSAR1611115A	685806	12
PULSAR161115A	685791	12
PULSAR1611230060	685808	12
PULSAR1611230A	685807	12
PULSAR1611240A	685809	12
PULSAR16123060	685785	12
PULSAR161230A	685792	12
PULSAR161240A	685793	12
PULSAR1620008A	685794	12
PULSAR1620012A	685795	12
PULSAR1620024A	685796	12
PULSAR1620048A	685797	12
PULSAR162008A	685810	12
PULSAR1620115A	685798	12
PULSAR162012A	685811	12
PULSAR162023060	685799	12
PULSAR1620230A	685800	12
PULSAR1620240A	685801	12
PULSAR162024A	685812	12
PULSAR162048A	685813	12
PULSAR162115A	685814	12
PULSAR162230A	685815	12
PULSAR162240A	685816	12
PULSAR3210008A	685817	12
PULSAR3210012A	685818	12
PULSAR3210024A	685819	12
PULSAR3210048A	685820	12
PULSAR3210115A	685821	12
PULSAR3210230A	685822	12
PULSAR3210240A	685823	12
PULSAR3220008A	685824	12
PULSAR3220012A	685825	12
PULSAR3220024A	685826	12
PULSAR3220048A	685827	12
PULSAR3220115A	685828	12
PULSAR3220230A	685829	12
PULSAR3220240A	685830	12
PULSARAUX11	685879	13
PULSARAUX20	685880	13
PULSARC	685881	13
PULSARC161 024A	685839	13
PULSARC1610008A	685831	13
PULSARC1610012A	685832	13
PULSARC1610024A	685833	13
PULSARC1610048A	685834	13
PULSARC161008A	685837	13
PULSARC161012A	685838	13
PULSARC1610230A	685835	13
PULSARC1610240A	685836	13
PULSARC161048A	685840	13
PULSARC161230A	685841	13
PULSARC161240A	685842	13
PULSARC1620008A	685843	13
PULSARC1620012A	685844	13
PULSARC1620024A	685845	13
PULSARC1620048A	685846	13
PULSARC162008A	685849	13
PULSARC162012A	685850	13
PULSARC1620230A	685847	13
PULSARC1620240A	685848	13
PULSARC162024A	685851	13
PULSARC162048A	685852	13
PULSARC162230A	685853	13

Cat. No.	Ref. No.	Page
PULSARC162240A	685854	13
PULSARC3210008A	685855	13
PULSARC3210012A	685856	13
PULSARC3210024A	685857	13
PULSARC3210048A	685858	13
PULSARC3210230A	685859	13
PULSARC3210240A	685860	13
PULSARC3220008A	685861	13
PULSARC3220012A	685862	13
PULSARC3220024A	685863	13
PULSARC3220230A	685864	13
PULSARC3220240A	685865	13
PULSARC3230008A	685867	13
PULSARC3230012A	685868	13
PULSARC3230024A	685869	13
PULSARC3230048A	685870	13
PULSARC3230230A	685871	13
PULSARC3230240A	685872	13
PULSARCAP	685885	13
PULSARCAPM	685884	13
PULSARM	685882	13
PULSARPU1620024A	685875	13
PULSARPU1620230A	685876	13
PULSARPU162024A	685873	13
PULSARPU162230A	685874	13
PULSARPU1640024A	685877	13
PULSARPU1640230A	685878	13

The policy of GE Energy Connections is one of continuous improvement. The right is reserved to alter the design or any structural details of the products at any time without giving notice.

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GE Energy Connections

Since Thomas Edison patented the world's first circuit breaker, Industrial Solutions has been transforming the future of electrification. We design electrical solutions at the crossroads of digital and industrial – smart, rugged and equipped to control electricity from the grid to its point of use. Every day, we partner with our customers to solve their toughest energy challenges and reimagine industry in a way that only the world's digital industrial company can.

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