

FDV – DOKUMENTASJON		Nr.:047
		Rev.:
		Dato: 29.11.2018
Produktspesifikasjon	Impulsrelé	
Produktnavn	Serie Pulsar S	
Anvisning for drift	Ingen	
Vedlikehold	Produktet er vedlikeholdsfritt	
Henvisninger Vedlegg	Produktkatalog, dokumentasjon, brukerveiledning og tekniske data	
Produsent	General Electric	
Importør	EFA Elektro AS, Postboks 593, 1411 Kolbotn, Norway Tlf. 66812400 e-mail: post@efa.no - www.efa.no	

EFA Elektro AS



Pulsar S

Modular DIN-rail devices



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.












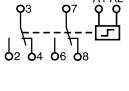




Performance

		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
	2 P	Mod.	1	1	1 ½	1 ½
	3 P	Mod.	2	2	-	2 ½
	4 P	Mod.	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
	3P and 4P	VA	18	18	18	18
Coil power loss - AC	1P and 2P	VA	9	9	9	9
	3P and 4P	VA	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
	Load 1P-3P and 4P	mm ²	1 / 10	1 / 10	1 / 10	1 / 10
	Load 2P	mm ²	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
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.

















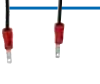


Pulsar S - Impulse switches

	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       	1NO							
	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	
	1CO							
	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	
	2NO							
	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		
2CO								
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		
1NO								
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		
2NO								
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		
3NO								
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		
Permanent use   	2NO							
	16A	2NO	24V	1	PULSARPU162024A	685873	1	
	16A	2NO	230V	1	PULSARPU162230A	685874	1	
	2CO							
	16A	2CO	24V	2	PULSARPU1620024A	685875	1	
	16A	2CO	230V	2	PULSARPU1620230A	685876	1	
4NO								
16A	4NO	24V	2	PULSARPU1640024A	685877	1		
16A	4NO	230V	2	PULSARPU1640230A	685878	1		
Add-on auxiliary contact  	1NO 1NC							
	6A	1NO 1NC	-	0.5	PULSARAUX11	685879	1	
2NO								
6A	2NO	-	0.5	PULSARAUX20	685880	1		
Add-on central control 		A2 O						
		OFF ON		0.5	PULSARC	685881	1	
Multilevel central command module 		OFF ON						
		OFF ON		0.5	PULSARM	685882	1	
Capacity module 			230/240V					
					PULSARCAPM	685884	1	
Sealing cap 				1	PULSARCAP	685885	2	
Spacer 				0.5	PLC/CTX SP	686069	50	

Pulsar S