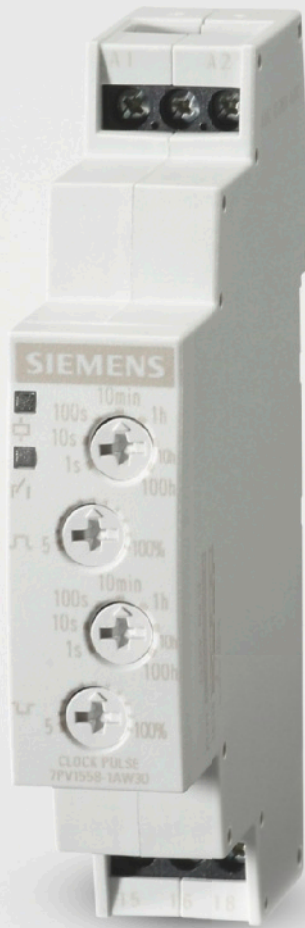


7PV15 Timing Relays

Catalog News LV 1 N · 01/2009



SIRIUS

Answers for industry.

SIEMENS

Related catalogs

Low-Voltage Controls

SIRIUS · SENTRON · SIVACON

Order No.:

Catalog

E86060-K1002-A101-A8
incl. PDF CD-ROM

LV 1

Technical Information
E86060-T1002-A101-A8

LV 1 T



Contents

Systems • Switchgear: Contactors and contactor assemblies, solid-state switching devices • Protection equipment • motor, soft starter and load feeders • monitoring and control devices • detecting devices • commanding and signaling devices • transformers • power supplies • planning and configuration with SIRIUS • Power Management System • SIVACON Power Distribution Boards, Busway and Cubicle Systems • SENTRON Switching and Protection Devices for Power Distribution: Air circuit breakers, molded case circuit breakers, switch disconnectors, busbar systems • Software for power distribution • BETA low-voltage circuit-protection devices

Low-voltage controls and distribution

Switchgear and components for applications according to UL

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E86060-K1816-A101-A2

LV 16



SIRIUS Circuit Breaker 3RV17 and 3RV18 according to UL 489/CSA C22.2 No.5-02 • SIVACON components for feeder circuits • SENTRON air circuit breaker/non-automatic air circuit breaker 3WL5 according to UL 489/IEC 60947-2 • SENTRON 3VL molded case circuit breakers according to UL 489/IEC 60947-2 • ALPHA devices according to UL standard • BETA devices

SIMATIC NET

Industrial communication

Order No.:

E86060-K6710-A101-B6

IK PI



PROFINET/Industrial Ethernet • Industrial Wireless Communication • PROFIBUS • SIMATIC ET 200 distributed peripherals • AS-Interface • Telecontrol • Routers • ECOFAST system

SIVACON Cubicle systems and cubicle air-conditioning

Order No.:

E86060-K1920-A101-A4

LV 50



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SIDAC Reactors and filters

Order No.:

E86060-K2803-A101-A4

LV 60



Commutating reactors for converters • Mains reactors for frequency converters • iron output reactors • ferrite output reactors • iron smoothing reactors • iron smoothing reactors • filter reactors • application-specific reactors • radio interference suppression filters

SIVACON 8PS Busbar trunking systems CD-L, BD01, BD2 to 1250 A

Order No.:

E86060-K1870-A101-A4

LV 70



Busbar Trunking Systems, Overview • CD-L system (25 A to 40 A) • BD01 system (40 A to 160 A) • BD2 system (160 A to 1250 A)

The Offline Mall

Order No.:

E86060-D4001-A500-C7 (DVD)

CA 01



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The Online Mall

Internet:

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Catalog PDF

Internet:

<http://www.automation.siemens.com/cd>


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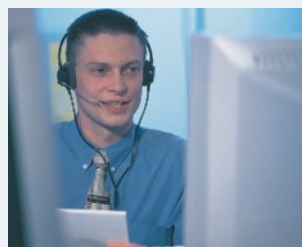
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E-mail: technical-assistance@siemens.com

SIRIUS

7PV15 Timing Relays

Catalog News LV 1 N · 01/2009



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Prices apply from 01/2009

Contact your local Siemens sales office for further information

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Answers for industry.
Low-voltage controls and distribution.
The basis for advanced solutions.

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- SITOP
- LOGO!Power

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PROFIBUS
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ECOFAST ES
SIMOCODE ES
Modular Safety System ES
Soft Starter ES

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Busway Systems and Cubicle Systems

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3RS10, 3RS11 Temperature Monitoring Relays
3RN1 Thermistor Motor Protection
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Glossary · Training · Order information · Further documentation · Standards and approvals · Quality management · Siemens contacts · External partners · Online services · Customer support · Software licenses · Subject index · Order number index including metal surcharges and export markings · Terms and conditions of sale and delivery, export regulations

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Explanations

General information

Delivery time class (DT)

▶ Preferred type	Preferred types are available immediately from stock, i.e. are dispatched within 24 hours.
A 2 working days	
B 1 week	Normal quantities of the products are usually delivered within the specified time following receipt of your order at our branch.
C 3 weeks	
D 6 weeks	In exceptional cases, the actual delivery time may differ from that specified.
X On request	

The delivery times apply up to the ramp at Siemens AG (products ready for dispatch). The transport times depend on the destination and type of shipping. The standard transport time for Germany is 1 day.

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Price units (PU)

The price unit defines the number of units, sets or meters to which the specified price and weight apply.

Packaging sizes (PS)

The packaging size defines the number, e. g. of units, sets or meters, for outer packaging. Only the quantity defined by the packaging size or a multiple thereof can be ordered!

For multi-unit packing and reusable packaging see [Appendix of the catalog LV1 · 2009](#).

Price groups (PG)

Each product is assigned to a price group.

Weight

The defined weight in kg refers to the price unit (PU).

Dimensions

All dimensions in mm.

Symbol

This symbol is used in conjunction with an orange background to mark screw terminals.

Terminal

Screw terminals



Explanations

UL-certified devices

UL standards are applied in North America and a number of other countries. This is important in particular for European exports of electrical switchgear and machine-integrated equipment, above all to the USA. Acceptance and delivery are possible only if the relevant UL standards are satisfied.

UL 508A "Standard for Industrial Control Panels" describes the design of control cabinets and implementation of integral components with reference to other pertinent UL standards where applicable. As such, this standard represents the basis for all electrical systems used in North America.

Our consideration of both IEC directives as well as UL standards as early as in our products' development phase results in a broad portfolio of UL-certified products for low-voltage switching and protection technology.

Whether SENTRON circuit breakers, SIRIUS switching devices – including motor-protective circuit breakers, starters, contactors and overload relays –, SENTRON switch disconnectors, SIRIUS detecting and command devices, busbar systems, terminals, miniature circuit breakers, fuses or SIRIUS transformers and filters – our portfolio of low-voltage controls and distribution

products ensures your being on the safe side in terms of UL and facilitates the easy and fast assembly of control cabinets according to UL.

Our UL-certified portfolio can be found partly in this catalog and in greater concentration in Catalog LV 16, "Controls and Components for Applications According to UL".



Order number index and export markings

Order No.	Export markings		Page
	ECCN	AL	
7PV15			
7PV15 08	N	N	7/4
7PV15 12	N	N	7/4
7PV15 13	N	N	7/4
7PV15 18	N	N	7/4
7PV15 38	N	N	7/4
7PV15 40	N	N	7/4
7PV15 58	N	N	7/5
7PV15 78	N	N	7/5

Explanations

Monitoring and Control Devices

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Catalog

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3RP, 3RT19, 7PV Timing Relays

General data

Overview

7PV15 Timing Relays
in Enclosure, 17.5 mm

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Overview

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Benefits

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Application

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Selection and ordering data

Technical Information

You will find technical information at

at www.siemens.com/lowvoltage/support
under:

- Technical specifications
- Operating instructions
- Function charts
- Certificates

3RP, 3RT19, 7PV Timing Relays

General data

Overview

Selection table for 7PV15 functions

Function	Function chart	7PV15 timing relays							
		7PV15 08	Identification letter	7PV15 12 7PV15 13 7PV15 18	7PV15 38	7PV15 40	7PV15 58	7PV15 78	
<div style="display: flex; align-items: center;"> <div style="width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, black 2px, black 4px); border: 1px solid black; margin-right: 5px;"></div> Timing relay energized <div style="width: 20px; height: 10px; background-color: black; border: 1px solid black; margin-right: 5px;"></div> Contact closed <div style="width: 20px; height: 10px; border: 1px solid black; margin-right: 5px;"></div> Contact open </div>									
1 CO contact									
ON-delay		■	A	■					
OFF-delay with auxiliary voltage		■	B		■				
OFF-delay without auxiliary voltage						■			
Flashing, starting with interval (pulse/interval 1:1)		■	C						
Clock-pulse, starting with interval (dead time, pulse time, and time setting ranges each separately adjustable)							■		
Passing make contact		■	D						
Passing break contact with auxiliary voltage		■	E						
Pulse-forming with auxiliary voltage (pulse generation at the output does not depend on duration of energizing)		■	F						
Additive ON-delay with auxiliary voltage		■	G						
2 CO contacts									
Wye-delta function								■	

Note:

With the 7PV15 08 multifunction relay the identification letters A to G are printed on the front alongside the rotary selector switch. The related function can be found in the form of a bar graph on the side of the device.

7PV15 timing relays in enclosure, 17.5 mm

Overview



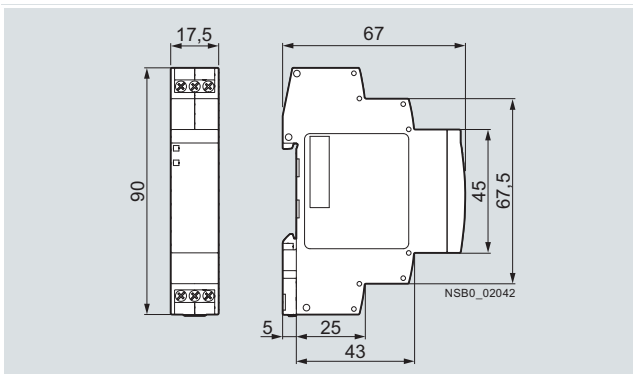
Standards

The timing relays comply with:

- EN 60721-3-3 "Environmental conditions"
- EN 61812-1/DIN VDE 0435 Part 2021 "Electrical relays, timing relays"
- EN 61000-6-2 and EN 61000-6-4 "Electromagnetic compatibility"
- EN 60947-5-1 (VDE 0660 Part 200) "Low-voltage controlgear"
- DIN 43880 "Modular installation devices; enclosure dimensions and related mounting dimensions"

Enclosure version

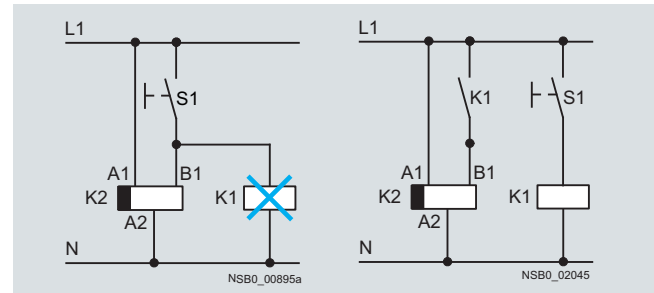
All timing relays are suitable for snap-on mounting onto TH 35 standard mounting rails according to EN 60715. The enclosure complies with DIN 43880, 1 MW.



Dimensions

Note:

The activation of loads parallel to the start input is not permissible when using AC control voltage (see diagrams).



Benefits

- Wide voltage range 12 ... 240 V AC/DC
- High switching capacity, e. g. AC15 at 230 V, 3 A
- Combination voltage, e. g. 24 V AC/DC and 200 ... 240 V AC
- Changes to the time setting range during operation
- Changes to the function in the de-energized state
- High level of functionality and a high repeat accuracy of timer settings
- Integrated surge suppressor
- Function charts printed on the side of the device for reliable device adjustment

Application

Timing relays are used in control, starting, and protective circuits for all switching operations involving time delays, e. g. in functional buildings, airports, industrial buildings etc.

3RP, 3RT19, 7PV Timing Relays


7PV15 timing relays in enclosure, 17.5 mm

Selection and ordering data

Solid-state timing relays for general use and in control systems, mechanical engineering and infrastructure with:

- 1 CO contact
- Multifunction or monofunction

- Wide voltage range or combination voltage
- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		AC 50/60 Hz V	DC V	Order No.	Price € per PU			kg

7PV15 08 timing relays, multifunction, 7 time setting ranges



7PV15 08-1AW30

The functions can be adjusted by means of rotary switches. The same potential must be applied to terminals A. and B.

With LED and 1 CO contact, 7 functions	0.05 ... 1 s 0.5 ... 10 s 5 ... 100 s 30 s ... 10 min 3 min ... 1 h 30 min ... 10 h 5 ... 100 h	12 ... 240	12 ... 240	▶	7PV15 08-1AW30	63.—	1	1 unit	101	0.136
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7PV15 1. timing relays, ON-delay, 1 time setting range



7PV15 12-1AP30

With LED and 1 CO contact	0.5 ... 10 s	24/100 ... 127	24	▶	7PV15 12-1AQ30	33.10	1	1 unit	101	0.108
		24/200 ... 240	24	▶	7PV15 12-1AP30	33.10	1	1 unit	101	0.108
	5 ... 100 s	24/100 ... 127	24	▶	7PV15 13-1AQ30	33.10	1	1 unit	101	0.107
		24/200 ... 240	24	▶	7PV15 13-1AP30	33.10	1	1 unit	101	0.108

7PV15 18. timing relays, ON-delay, 7 time setting ranges



7PV15 18-1AW30

With LED and 1 CO contact	0.05 ... 1 s 0.5 ... 10 s 5 ... 100 s 30 s ... 10 min 3 min ... 1 h 30 min ... 10 h 5 ... 100 h	12 ... 240	12 ... 240	▶	7PV15 18-1AW30	42,80	1	1 unit	101	0.159
---------------------------	---	------------	------------	---	-----------------------	--------------	---	--------	-----	-------

7PV15 38. timing relays, OFF-delay, with auxiliary voltage, 7 time setting ranges



7PV15 38-1AW30

With LED and 1 CO contact	0.05 ... 1 s 0.5 ... 10 s 5 ... 100 s 30 s ... 10 min 3 min ... 1 h 30 min ... 10 h 5 ... 100 h	12 ... 240	12 ... 240	▶	7PV15 38-1AW30	57.—	1	1 unit	101	0.140
---------------------------	---	------------	------------	---	-----------------------	-------------	---	--------	-----	-------

7PV15 40. timing relays, OFF-delay, without auxiliary voltage, 7 time setting ranges



7PV15 40-1AW30




With LED and 1 CO contact	0.05 ... 1 s 0.15 ... 3s 0.3 ... 6 s 0.5 s ... 10 s 1.5 min ... 30 s 3 ... 60 s 5 ... 100 s	12 ... 240	12 ... 240	▶	7PV15 40-1AW30	72.—	1	1 unit	101	0.116
---------------------------	---	------------	------------	---	-----------------------	-------------	---	--------	-----	-------

3RP, 3RT19, 7PV Timing Relays

7PV15 timing relays in enclosure, 17.5 mm

Solid-state timing relays for general use and in control systems, mechanical engineering and infrastructure with:

- 1 and 2 CO contacts
- Wide voltage range
- Single or selectable time setting ranges
- Switch position indication by LED
- Voltage indication by LED

Version	Time setting range t adjustable by rotary switch to	Rated control supply voltage U_s		DT	Screw terminals 		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
		AC 50/60 Hz V	DC V		Order No.	Price € per PU					
7PV15 58. timing relays, clock-pulse relay, 7 time setting ranges											
 7PV15 58-1AW30	With LED and 1 CO contact	0.05 ... 1 s	12 ... 240	12 ... 240	▶	7PV15 58-1AW30	73.—	1	1 unit	101	0.111
		0.5 ... 10 s									
		5 ... 100 s									
		30 s ... 10 min									
		3 min ... 1 h									
		30 min ... 10 h									
		5 ... 100 h									
7PV15 78. timing relays, wye-delta function, 7 time setting ranges											
 7PV15 78-1BW30	With LED and 2 CO contacts	0.05 ... 1 s	12 ... 240	12 ... 240	▶	7PV15 78-1BW30	49.—	1	1 unit	101	0.113
		0.5 ... 10 s									
		5 ... 100 s									
		30 s ... 10 min									
		3 min ... 1 h									
		30 min ... 10 h									
		5 ... 100 h									

3RP, 3RT19, 7PV Timing Relays

Notes

7

Conditions of sale and delivery Export regulations

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