

				
Bulletin No.	700-SH	700-SE	700-SC	
Type	Hockey Puck	Flat Pack	Miniature, Ice Cube Socketed	
Features	- Panel/DIN Mount - High Current - Protective Cover - LED Status Option	- Panel/DIN Mount - Low Profile	- Compatible w/700-HN103 or 128 socket - LED Status & Zero-cross AC Switching Options	
Load Type	AC (47...63 Hz)	AC (47...63 Hz)	AC (47...63 Hz)	DC
Load Voltage Range	24...240V AC, 200...480V AC ❶	75...264V AC	75...264V AC	3...52.8V DC or 3...125V DC
Load Current Max. (Continuous)	6 A/40 A ❷	5 A/20 A ❷	3 A	3A @ 48V 2A @ 110V
Max Leakage Current to Load	5 mA @ 100V, 10 mA @ 200V, 20 mA @ 400V	5 mA @ 100V, 10 mA @ 200V	5 mA @ 100V AC 10 mA @ 200V AC	5 mA @ 50V DC, or 0.1mA @ 100V DC
Zero Cross Load Switching	Yes	Yes (optional)	Yes (optional)	N/A
Equivalent Electromechanical Relay Contact Arrangement	Form A	Form A	Form A	
Rated Control (Input) Voltage	5...24V DC 100...120V AC 200...240V AC	5V DC 12V DC 24V DC	5...24V DC 100...110V AC 200/220V AC	5...24V DC
LED Indicator	Yes	No	Yes (optional)	Yes (optional for 48V DC)
Mounting Method	Panel w/o heat sink, Panel or DIN w/heat sink	Panel w/o heat sink, Panel or DIN w/heat sink	Panel or DIN w/socket	
Dielectric Strength	2500V AC, 50/60 Hz, 1 min.	2000V AC, 50/60 Hz, 1 min.	1500V AC, 50/60 Hz, 1 min.	
Certification	cURus, CE ❶, TÜV	cURus, CE, TÜV	cURus, CE, VDE	
Max. Ambient Operating Temperature	-30...80°C (no condensation)	-30...80°C (no condensation)	-30...80°C (no condensation)	
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❶ 200...480V load voltage range units do not have CE approval.

❷ With heat sink.

Bulletin 700-S, 156

Solid State Devices

Quick Selection Table

						
Bulletin No.	700-SA		700-SK			
Type	Tube Base, Socketed		Slim Line, Socketed			
Features	- Compatible w/700-HN100, 125,108, and 202 socket - LED status - zero-cross switching		- Compatible w/700-HN121 socket. - Supports Input (sensor) module or Output (SSR) module			
Load Type	AC (47...63 Hz)	DC	Output Module		Input Module	
			AC (47...63 Hz)	DC	AC (47...63 Hz)	DC
Load Voltage Range	75...264V AC	3 ...125V DC	75 ... 264V AC	4 ... 60V DC, 40 ... 200V DC	Field Input: 60... 264V AC	Field Input: 6.6... 32V DC
Load Current Max. (Continuous)	5 A	3 A	2 A	2A @ 60V, 1.5A @ 200V	Supply Current: 0.1 ... 100 mA	Supply Current: 0.1 ... 100 mA
Max Leakage Current to Load	5 mA @ 100V, 10 mA @ 200V	5 mA @ 125V	1.5 mA	1 mA	5 µA	5 µA
Zero Cross Load Switching	Yes	N/A	Yes (optional)	N/A	No	N/A
Equivalent Electromechanical Relay Contact Arrangement	Form A		Form A			
Rated Control (Input) Voltage	5...24V DC		5 ... 24V DC			
LED Indicator	Yes		Yes			
Mounting Method	Panel or DIN w/socket		Panel or DIN w/socket			
Dielectric Strength	1500V AC, 50/60 Hz, 1 min.		4000V AC, 50/60 Hz, 1 min.			
Certification	cURus, CE, VDE		cURus, CE, TÜV			
Max. Ambient Operating Temperature	-30...80° C (no condensation)		-30...80° C (no condensation)			
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Bulletin No.	156	156	156
Type	Single Phase	Dual Phase	Three Phase
Current Ratings	15, 30, or 50 A	30 or 50 A	10 or 20 A
Operational Voltage	24...600V AC	24...600V AC	
Control Voltage	5...24V DC	5...24V DC	
	24...230V AC	24...230V AC	
Product Mountings	DIN or Panel	DIN or Panel	
Applications	• Long Life: Solid State Contactors use electronic current switching devices –since there are no moving parts, this means long life. This makes the solid state contactor ideal for high duty cycle applications such as heaters. • Low Maintenance: There are no moving parts or contacts to wear out, or to be effected by shock and vibration. Maintenance Pounds, parts replacement, and downtime are reduced drastically, if not eliminated altogether. • Typical Applications: Ovens (Industrial and Commercial Cooking), Plastic Molding/Extruding Machines, Packaging Equipment, Replacement for Mercury Relays and Contactors	• Long Life: Solid State Contactors use electronic current switching devices –since there are no moving parts, this means long life. This makes the solid state contactor ideal for high duty cycle applications such as heaters. • Low Maintenance: There are no moving parts or contacts to wear out, or to be effected by shock and vibration. Maintenance Pounds, parts replacement, and downtime are reduced drastically, if not eliminated altogether. • Typical Applications: Ovens (Industrial and Commercial Cooking), Plastic Molding/Extruding Machines, Packaging Equipment, Replacement for Mercury Relays and Contactors	
Approvals/Standards	IEC 60947-4-2 IEC 60947-4-3 CE cULus CSA	IEC 60947-4-2 IEC 60947-4-3 CE cULus CSA	
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Solid State Devices

Product Selection: 700-SH, 700-SE

700-SH Hockey Puck Relays for DIN Rail Mounting



700-SH



700-SE

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output: Max. Cont. Current & Voltage Range ❶	Rated Input Control Voltage	Cat. No.	PQ
Phototriac	Yes	Yes	5 A @ 24...240V AC	5...24V DC	700-SH05GZ25	1
Photocoupler				100...120V AC	700-SH05GA12	
				200...240V AC	700-SH05GA22	
Phototriac	Yes	Yes	10 A @ 24...240V AC	5...24V DC	700-SH10GZ25	
Photocoupler				100...120V AC	700-SH10GA12	
				200...240V AC	700-SH10GA22	
	Yes	Yes	10 A @ 200...480V AC	5...24V DC	700-SH10HZ25	
Phototriac				5...24V DC	700-SH25GZ25	
Photocoupler				100...120V AC	700-SH25GA12	
	Yes	Yes	25 A @ 24...240V AC	200...240V AC	700-SH25GA22	
Phototriac				5...24V DC	700-SH25HZ25	
Photocoupler				25 A @ 200...480V AC	700-SH25HZ25	
	Yes	Yes	40 A @ 24...240V AC	5...24V DC	700-SH40GZ25	
Phototriac				100...120V AC	700-SH40GA12	
Photocoupler				200...240V AC	700-SH40GA22	
			40 A @ 200...480V AC	5...24V DC	700-SH40HZ25	

700-SE Flat Pack Relay for DIN Rail Mounting

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output: Max. Cont. Current & Voltage Range ❶	Rated Input Control Voltage	Cat. No.	PQ
Phototriac	Yes	No	5 A @ 100...240V AC	5V DC	700-SE05GZZ05	1
				12V DC	700-SE05GZZ12	
				24V DC	700-SE05GZZ24	
			10 A @ 100...240V AC	5V DC	700-SE10GZZ05	
				12V DC	700-SE10GZZ12	
				24V DC	700-SE10GZZ24	
			20 A @ 100...240V AC	5V DC	700-SE20GZZ05	
				12V DC	700-SE20GZZ12	
				24V DC	700-SE20GZZ24	
	No	No	5 A @ 100...240V AC	5V DC	700-SE05GNZ05	
				12V DC	700-SE05GNZ12	
				24V DC	700-SE05GNZ24	
			10 A @ 100...240V AC	5V DC	700-SE10GNZ05	
				12V DC	700-SE10GNZ12	
				24V DC	700-SE10GNZ24	
			20 A @ 100...240V AC	5V DC	700-SE20GNZ05	
				12V DC	700-SE20GNZ12	
				24V DC	700-SE20GNZ24	

❶ Maximum load current when mounted on a heat sink

Accessories

Description	Cat. No.	PQ
Heat Sink— Panel or DIN Rail Mount	700-S10	1
	700-S20	
	700-S30	

700-SC Ice Cube Relays with Blade Style Terminals



700-SC



700-SA

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output Max. Cont. Current and Voltage Range	Rated Input Control Voltage	Cat. No.	PQ
Photocoupler	Yes	Yes	3 A @100...240V AC	5...24V DC	700-SCZY3Z25	1
			2 A @ 100...240V AC	100/110V AC	700-SCZY2A1	
				200/220V AC	700-SCZY2A2	
Phototriac	No	Yes	3 A @100...240V AC	24V DC	700-SCTY3Z24	
Photocoupler	N/A	No	3 A @ 4...48V DC	5...24V DC	700-SCNY3Z25	
	Yes		3 A @ 100...240V AC	4...24V DC	700-SCZN3Z26	
Phototriac	No	No	3 A @ 100...240V AC	24V DC	700-SCTN3Z24	
Photocoupler	N/A	No	3 A @ 4...48V DC	4...24V DC	700-SCNN3Z26	
			2 A @ 5...110V DC	5...24V DC	700-SCNN2Z25	

Sockets/Accessories for Ice Cube Relay

Description	Cat. No.	PQ
14 Blade Relay Socket	700-HN103	10
14 Blade Relay Socket with Module Slot	700-HN104	
Retainer Clip	700-HN114	
ON-Delay Timing Module	700-AT1	1
One Shot Timing Module	700-AT2	

700-SA Tube Base Relays with Pin Terminals

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output Max. Cont. Current and Voltage Range	Rated Input Control Voltage	Cat. No.	PQ
Photocoupler	Yes	Yes	5 A @100...240V AC	5...24V DC	700-SAZY5Z25	1
	N/A	Yes	3 A @ 5...110V DC		700-SANY3Z25	

Sockets/Accessories for Tube Base Relays

Description	Cat. No.	PQ
8 Pin Relay Socket	700-HN100	10
8 Pin Relay Socket with Module Slot	700-HN202	10
Retainer Clip	700-HN157	1

See Publication 700-SG003B-EN-P for complete product information
PQ = Package Quantity

Bulletin 700-S, 156
Solid State Devices
Product Selection: 700-SK

700-SK Slim Line Relay with Plug-in Quick Connect Terminals



700-SK

- High response speed models
- Input Sensor Module to allow high voltage 100...240V AC or 12...24V DC
- sensor interface to low voltage (logic) device such as a PC
- Output Module for typical Solid State Relays applications

Input/Sensor Module

Input-to-Output Isolation Method	LED Indicator	Response Speed	Logic Level		Input Sensor Voltage	Cat. No.	PQ
			Supply Voltage	Supply Current			
Photocoupler	Yes	10 Hz	4...32V DC	0.1...100 mA	100...240V AC	700-SKICA18	1
		High-speed (1 kHz)	4...32V DC	0.1...100 mA	12...24V DC	700-SKICZ24	

Output/SSR Module

Input-to-Output Isolation Method	Zero Cross Function	LED Indicator	Output Max. Cont. Current and Voltage Range	Input Control Voltage	Cat. No.	PQ	
Phototriac	Yes	Yes	2 A @ 100...240V AC	5...24V DC	700-SK0Z2Z25	1	
	No				700-SK0N2Z25		
Photocoupler	N/A		2 A @ 5...48V DC		700-SK0C2Z25	1	
			1.5 A @ 48...200V DC		700-SK0C1Z25		

Sockets for Slim Line Relays

Description	Cat. No.	PQ
Socket	700-HN121	10

See Publication 700-SG003B-EN-P for complete product information
PQ = Package Quantity

Bulletin 156 Solid State Contactors



- Compact modular design complete with heatsink
- DIN Rail mountable
- Easy and quick installation
- Specification according to industry standard
- Available in single-phase, dual-phase or three-phase version
- Operational current up to 50 A (AC-1), 15 A (AC-3)
- LED Status indication.
- Line voltage up to 600V AC
- Universal control voltage
- Burst firing (zero cross)
- IP 20 protection
- Built-in varistor protection phase or three-phase
- Standards compliance: CE marked, cULus, CSA

Single-Phase

Current Rating [A]	Control Voltage	Operating Voltage	Cat. No.	PQ
15	5...24V DC	24...480V AC	156-A15BB1	1
	24...230V AC/DC		156-A15BA1	
30	5...24V DC		156-A30BB1	
	24...230V AC/DC		156-A30BA1	
50	5...24V DC		156-A50BB1	
	24...230V AC/DC		156-A50BA1	

Dual-Phase

Current Rating [A]	Control Voltage	Operating Voltage	Cat. No.	PQ
30	5...24V DC	24...480V AC	156-A30BB2	1
	24...230V AC/DC		156-A30BA2	
50	5...24V DC		156-A50BB2	
	24...230V AC/DC		156-A50BA2	

Three-Phase

Current Rating [A]	Control Voltage	Operating Voltage	Cat. No.	PQ
10	5...24V DC	24...480V AC	156-A10BB3	1
	24...230V AC/DC		156-A10BA3	
20	5...24V DC		156-A20BB3	
	24...230V AC/DC		156-A20BA3	

Other types for operating voltage 24...230V AC and 24...600V AC available.

See Publication 156-PP001A-EN-P for complete product information
PQ = Package Quantity