ENERGY AND AUTOMATION

SOLID STATE RELAY COMPLETE WITH HEATSINK, THREE-PHASE (2 CONTROLLED), 60A, 90...280VAC, SCREW TERMINALS



Product designation Solid state relay Product type designation HSZC Type Product type designation HSZC control PSZC controlled) Type Three-phase (2 controlled) Control voltage Control voltage pick-up Operating voltage pick-up Operating voltage pick-up Operating voltage drop-out V 20 V 90280VAC Operating voltage limits Operating voltage drop-out V 20 V 90280VAC Operating type the value of the				
Product type designation	Product designation			Solid state relay
Imput characteristics	Product type designation			
Pount characteristics	Tyne			Three-phase (2
Control voltage 90280VAC Operating voltage limits Operating voltage pick-up Operating voltage pick-up Operating voltage drop-out V 90 Input current at minmax voltage mA 2350 Operating times Witching-on Half cycle max Switching-off Early Comman of Switching-off Half cycle max Output characteristics Zero crossing Switching mode Zero crossing Rated operating voltage VAC 48600 Blocking voltage V 1200 Operational frequency (minmax) H2 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 40°C A 4 60 Rated operating current AC-51 (resistive load) at 40°C A 4 8 Rated operating current AC-51 (resistive load) at 40°C A 15 Operational current min A 530 4 Non repetitive surge peak on state current t=10ms A 530 4 Off state leakage current M 1 <				controlled)
Operating voltage limits Operating voltage pick-up Operating voltage drop-out V 20 V 20 Input current at minmax voltage mA 2350 Operating times mA 2350 Switching-off Half cycle max Switching off Balf cycle max Switching mode Zero crossing Rated operating voltage V 1200 Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dw/dt V/µs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Control terminals Type Screw Terminal characteristics Reminals tool Relade 3.5mm Conductor section connectable (control terminals) with	•			
Operating voltage pick-up Operating voltage drop-out V 20				90280VAC
Operating voltage drop-out V 20	Operating voltage limits			
Imput current at minmax voltage				
Operating times Half cycle max Switching-off Half cycle max Output characteristics Ecro crossing Rated operating voltage VAC 48600 Blooking voltage VAC 48600 Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 5°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR Izt A2s 1404 Terminal characteristics Blade 3.5mm Confolictor section connectable (cont		Operating voltage drop-out	V	
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Switching-off Half cycle max Output characteristics Switching mode Zero crossing Rated operating voltage VAC 48600 Blocking voltage V 1200 Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current te10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1,2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output to metal base V 5000 Output protection type VDR VDR 12t A2s 1404 Terminal characteristics Type Screw Control terminals Nm 0.5Nm Tightening torque c				
Output Characteristics Zero crossing Switching mode VAC 48600 Blocking voltage V 1200 Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1,2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output isolation V 5000 Output protection type V 5000 2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool RAG 2812 Flexible c/w insulated spade lug nm 20.752.5 Load te				•
Switching mode Zero crossing Rated operating voltage VAC 48600 Blocking voltage V 1200 1200 Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type V 5000 Control terminals Type Screw Terminal characteristics Reminal characteristics Control terminals tool Type Screw Tightening torque control terminals Nm 0.5Nm 15 Conductor section connectable (control terminals) with 1 or 2 wires minmax Nm 2 812 mm 2 0.752.5 mm 2 0.752.5 mm 2 0.752.5 Loa				Half cycle max
Rated operating voltage	•			
Blocking voltage	Switching mode			Zero crossing
Operational frequency (minmax) Hz 4565 Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output to metal base V 5000 Output protection type VDR VDR Izt A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm Conductor section connectable (control terminals) with 1 or 2 wires minmax n° 2812 Flexible w/o lug mm2 0.752.5 Load terminals Type	Rated operating voltage		VAC	
Rated operating current AC-51 (resistive load) at 40°C A 60 Rated operating current AC-51 (resistive load) at 55°C A 48 Rated operating current AC-53 (motor load) at 40°C A 15 Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR 12 Interminal characteristics VDR 1404 Terminal characteristics Type Screw Terminals tool Blade 3.5mm 15 Tightening torque control terminals Nm 0.5Nm Ibin 4.5 0.752.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug n° 2812 Flexible c/w insulated spade lug			V	1200
Rated operating current AC-51 (resistive load) at 55°C	Operational frequency (minmax)		Hz	4565
Rated operating current AC-53 (motor load) at 40°C	Rated operating current AC-51 (resistive load) at 40°C		Α	60
Operational current min A 0.16 Non repetitive surge peak on state current t=10ms A 530 Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt W/μs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR VDR I2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm Ibin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax Nm 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Type Screw Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Rated operating current AC-51 (resistive load) at 55°C		Α	48
Non repetitive surge peak on state current t=10ms	Rated operating current AC-53 (motor load) at 40°C		Α	15
Off state leakage current mA 1 On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/µs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR I2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Tightening torque control terminals Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug	Operational current min		Α	0.16
On state output voltage drop V 1.2 Critical rate of rise of off-state voltage dv/dt V/μs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR I2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm Ibin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Type Screw Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Non repetitive surge peak on state current t=10ms		Α	530
Critical rate of rise of off-state voltage dv/dt V/μs 1000 Input - Output isolation V 5000 Input - Output to metal base V 5000 Output protection type VDR I2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm Ibin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug mm2 n° 2812 Flexible c/w insulated spade lug mm2 0.752.5 mm2 0.752.5 Load terminals Type Screw Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Off state leakage current		mA	1
Input - Output isolation	On state output voltage drop		V	1.2
Input - Output to metal base	Critical rate of rise of off-state voltage dv/dt		V/µs	1000
Output protection type VDR I2t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm Ibin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Type Screw Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Input - Output isolation		V	5000
Output protection type VDR 12t A2s 1404 Terminal characteristics Control terminals Type Screw Terminals tool Blade 3.5mm Tightening torque control terminals Nm 0.5Nm lbin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Type Screw Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Input - Output to metal base		V	5000
Terminal characteristics Control terminals Tominals tool Tightening torque control terminals No 0.5Nm lbin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals No 1.5	Output protection type			VDR
Control terminals Terminals tool Terminals tool Tightening torque control terminals Nm	I2t		A2s	1404
Terminals tool Tightening torque control terminals Nm	Terminal characteristics			
Tightening torque control terminals Nm 0.5Nm Ibin 4.5 Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5	Control terminals		Туре	Screw
Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5	Terminals tool			Blade 3.5mm
Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5	Tightening torque control terminals			
Conductor section connectable (control terminals) with 1 or 2 wires minmax AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Type Screw Load terminals torque load terminals Nm 1.5			Nm	0.5Nm
AWG stranded n° 2812 Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Type Screw PH2 Tightening torque load terminals Nm 1.5			Ibin	4.5
Flexible w/o lug mm2 0.752.5 Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5	Conductor section connectable (control terminals) with 1 or 2	wires minmax		
Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5	,	AWG stranded	n°	2812
Flexible c/w insulated spade lug mm2 0.752.5 Load terminals Load terminals tool Tightening torque load terminals Nm 1.5		Flexible w/o lug		
Load terminals Load terminals tool Type Screw PH2 Tightening torque load terminals Nm 1.5	Fle	•		
Load terminals tool PH2 Tightening torque load terminals Nm 1.5	Load terminals	·		
Nm 1.5	Load terminals tool			
Nm 1.5	Tightening torque load terminals			
			Nm	1.5
			lbin	13.3

On vertical plane



SOLID STATE RELAY COMPLETE WITH HEATSINK, THREE-PHASE (2 CONTROLLED), 60A, 90...280VAC, SCREW TERMINALS

Conductor section connectable (load terminals) with 1 or 2 wires min...max

AWG stranded n° 18...10 Flexible w/o lug mm2 1...6

Flexible c/w insulated spade lug mm2 1...16

allowable

Operating position

Fixing Screw or on 35mm DIN rail

Ambient conditions

Temperature

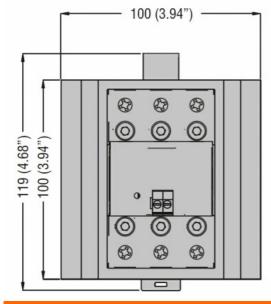
Operating temperature

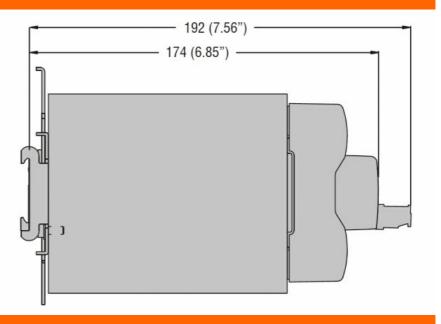
min °C -40 max °C +80

Storage temperature

min °C -40 max °C +130

Dimensions





Certifications and compliance

Certifications

IEC/EN/BS 60335-1

IEC/EN/BS 60947-4-2

IEC/EN/BS 60947-4-3

IEC/EN/BS 62314

Compliance

cULus

ETIM classification

EC000066 - Power contactor, AC switching