

RELÈ ALLO STATO SOLIDO MONOFASE CON DISSIPATORE INTEGRATO SERIE SSR170H SSR170H SERIES 1 PHASE SCR SOLID STATE RELAYS WITH HEAT SINK

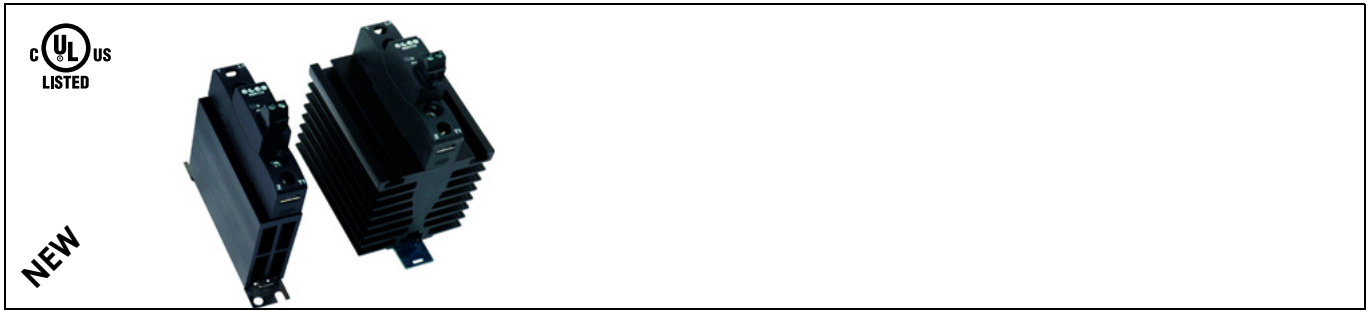


TABELLA SELEZIONE RELE' - RELAY SELECTION TABLE

Corrente di uscita Output current	Tensione di uscita Output voltage	Tensione di ingresso Input voltage	Modello Model
15A*	12-275 VAC	3-32 VDC	SSR170H-15240AS
		90-280 VAC	SSR170H-15240CS
	48-600 VAC	4-32 VDC	SSR170H-15600AS
		90-280 VAC	SSR170H-15600CS
20A*	12-275 VAC	3-32 VDC	SSR170H-20240AS
		90-280 VAC	SSR170H-20240CS
	48-600 VAC	4-32 VDC	SSR170H-20600AS
		90-280 VAC	SSR170H-20600CS
25A*	12-275 VAC	3-32 VDC	SSR170H-25240AS
		90-280 VAC	SSR170H-25240CS
	48-600 VAC	4-32 VDC	SSR170H-25600AS
		90-280 VAC	SSR170H-25600CS
30A	12-275 VAC	3-32 VDC	SSR170H-30240AS
		90-280 VAC	SSR170H-30240CS
	48-600 VAC	4-32 VDC	SSR170H-30600AS
		90-280 VAC	SSR170H-30600CS
40A*	12-275 VAC	3-32 VDC	SSR170H-40240AS
		90-280 VAC	SSR170H-40240CS
	48-600 VAC	4-32 VDC	SSR170H-40600AS
		90-280 VAC	SSR170H-40600CS
60A 50 A (40 °C)-UL	12-275 VAC	3-32 VDC	SSR170H-60240AS
		90-280 VAC	SSR170H-60240CS
	48-600 VAC	4-32 VDC	SSR170H-60600AS
		90-280 VAC	SSR170H-60600CS

- * Led tensione ingresso
- * Tensione di ingresso: 3-32 Vcc /4-32 Vcc, 90-280 Vca
- * Bassa corrente pilotaggio
- * Corrente nominale: 15/20/25/30/40/60 A
- * Commutazione zero crossing
- * Tensione di uscita fino a 600 Vca
- * Tensione di picco fino a 1200V
- * Isolamento ingresso uscita fino a 5000V
- * Protezione da sovratensioni integrata con varistore
- * RoHS conforme
- * Fissaggio su barra DIN

- * Input voltage led
- * Input voltage: 3-32 Vcc /4-32 Vcc, 90-280 Vac
- * Low control current
- * Rated operational current : 15/20/25/30/40/60 A
- * Zero crossing commutation
- * Output voltage up to 600Vac
- * Peak voltage up to 1200V
- * 5000V input-output insulation
- * Integrated voltage transient protection with varistor
- * RoHS compliant
- * DIN rail mountable

CONFORMI ALLE NORMATIVE EC
EC REFERENCE STANDARDS

CERTIFICAZIONI UL-CSA / UL-CSA CERTIFICATION
File N.: E234472
"General use - Open Type Device - Pollution Degree 3
Installation Environment"

* SSR170H-15A/20A/25A/40A: UL CERTIFIATION PENDING

DATI TECNICI USCITA - OUTPUT TECHNICAL DATA

Modello Model	SSR170H-15240xS	SSR170H-20240xS	SSR170H-25240xS	SSR170H-15600xS	SSR170H-20600xS	SSR170H-25600xS
Tensione nominale Nominal voltage	240 VAC	240 VAC	240 VAC	600 VAC	600 VAC	600 VAC
Campo tensione di carico Load voltage range	12-275 VAC	12-275 VAC	12-275 VAC	48-600 VAC	48-600 VAC	48-600 VAC
Picco ripetitivo allo stato di OFF Repetitive peak off-state voltage	600 V	600 V	600 V	1200 V	1200 V	1200 V
Corrente uscita Output current	15 A	20 A	25 A	15 A	20 A	25 A
Corrente di spunto non ripetitiva Non repetitive surge peak on state current t=10ms	400 A	400 A	520 A	400 A	400 A	520 A
I ² t per scelta fusibile I ² t rating t=10ms	792 A ² S	792 A ² S	1350 A ² S	792 A ² S	792 A ² S	1350 A ² S

DATI TECNICI USCITA - OUTPUT TECHNICAL DATA

Modello Model	SSR170H-15240xS	SSR170H-20240xS	SSR170H-25240xS	SSR170H-15600xS	SSR170H-20600xS	SSR170H-25600xS
Tempo critico salita tensione allo stato di off <i>Critical rate of rise of off-state voltage dv/dt</i>	500 V/μs	500 V/μs	500 V/μs	1000 V/μs	1000 V/μs	1000 V/μs
Caduta tensione in uscita <i>Output voltage drop</i>	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC
Perdita di corrente allo stato di off <i>Off-stage leakage current</i>	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA
Corrente minima di funzionamento <i>Minimum working current</i>	165 mA	165 mA	165 mA	165 mA	165 mA	165 mA
Varistore interno <i>Internal varistor</i>	300 V	300 V	300 V	680 V	680 V	680 V

DATI TECNICI USCITA - OUTPUT TECHNICAL DATA

Modello Model	SSR170H-30240xS	SSR170H-40240xS	SSR170H-60240xS	SSR170H-30600xS	SSR170H-40600xS	SSR170H-60600xS
Tensione nominale <i>Nominal voltage</i>	240 VAC	240 VAC	240 VAC	600 VAC	600 VAC	600 VAC
Range tensione di carico <i>Load voltage range</i>	12-275 VAC	12-275 VAC	12-275 VAC	48-600 VAC	48-600 VAC	48-600 VAC
Picco ripetitivo allo stato di OFF <i>Repetitive peak off-state voltage</i>	600 V	600 V	600 V	1200 V	1200 V	1200 V
Corrente uscita <i>Output current</i>	30 A	40 A	60 A	30 A	40 A	60 A
Corrente di spunto non ripetitiva <i>Non repetitive surge peak on state current t=10ms</i>	520 A	520 A	520 A	520 A	520 A	520 A
I ² t per scelta fusibile <i>I²t rating t=10ms</i>	1350 A ² S	1350 A ² S	1350 A ² S	1350 A ² S	1350 A ² S	1350 A ² S
Tempo critico salita tensione allo stato di off <i>Critical rate of rise of off-state voltage dv/dt</i>	500 V/μs	500 V/μs	500 V/μs	1000 V/μs	1000 V/μs	1000 V/μs
Caduta tensione in uscita <i>Output voltage drop</i>	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC	1,2 VAC
Perdita di corrente allo stato di off <i>Off-stage leakage current</i>	1 mA	1 mA	1 mA	1 mA	1 mA	1 mA
Corrente minima di funzionamento <i>Minimum working current</i>	165 mA	165 mA	165 mA	165 mA	165 mA	165 mA
Varistore interno <i>Internal varistor</i>	300 V	300 V	300 V	680 V	680 V	680 V

DATI TECNICI ENTRATA - INPUT TECHNICAL DATA

Modello Model	SSR170H-xx240AS	SSR170H-xx600AS	SSR170H-xxxxxCS
Tensione ingresso / <i>Input voltage</i>	3-32 VDC	4-32 VDC	90-280 VAC
Corrente di pilotaggio / <i>Control current range</i>	4-12 mA	8-12 mA	4,5-22 mA
Tensione di innesco / <i>Control pick-up voltage</i>	3 VDC	4 VDC	45 VAC
Tensione di disinnesco / <i>Control drop-out voltage</i>	2 VDC	2 VDC	20 VAC

DATI TECNICI ENTRATA/USCITA - INPUT/OUTPUT TECHNICAL DATA

Modello Model	SSR170H-xxxxxAS	SSR170H-xxxxxCS
Massimo ritardo chiusura / <i>Maximum closing delay</i>	10 ms	30 ms
Massimo ritardo apertura / <i>Maximum opening delay</i>	10 ms	50 ms
Isolamento (AC, 1 min.) / <i>Isolation voltage (AC, 1 min.)</i>	5000 V	5000 V

DATI TERMICI - THERMAL DATA

Temperatura di funzionamento <i>Operating temperature</i>	-40/+80°C
Temperatura di stoccaggio <i>Storage temperature</i>	-40/130°C



UL RATINGS (solo per modelli da 30A e 60A) / (Only for 30A and 60A models)

MODELLO / MODEL	INGRESSO / INPUT	
	Tensione nominale Nominal voltage	Frequenza (Hz) Frequency (Hz)
SSR170H xxx AS	12-24 VDC	DC
SSR170H xxx CS	240 VAC	50/60

MODELLO / MODEL	CARICO USCITA / OUTPUT LOAD		
	Tensione nominale Nominal voltage	Frequenza (Hz) Frequency (Hz)	Corrente Current
SSR170H-30240 xx	240 VAC	50/60	30 A
SSR170H-30600 xx	600 VAC		
SSR170H-60240 xx	240 VAC	50/60	50 A
SSR170H-60600 xx	600 VAC		

Massima temperatura ambiente 40 °C
Maximum Surrounding Air Temperature 40 °C

SPECIFICHE DI CONNESSIONE INGRESSO / INPUT CONNECTION SPECIFICATIONS

Tipo di conduttore / Wire type	Rigido Rigid	Flessibile senza puntalino Flexible without and sleeve	Flessibile con puntalino Flexible with and sleeve
Sezione Gauge	24-12 AWG 0,2-2,5 mm ²	24-12 AWG 0,2-2,5 mm ²	24-12 AWG 0,25-2,5 mm ²
Coppia di serraggio Tightening torque	0,6 Nm 5,3 lb/in		

SPECIFICHE DI CONNESSIONE USCITA / OUTPUT CONNECTION SPECIFICATIONS

Tipo di conduttore / Wire type	Rigido Rigid	Flessibile senza puntalino Flexible without and sleeve	Flessibile con puntalino Flexible with and sleeve
Sezione Gauge	18-10 AWG 1-6 mm ²	18-10 AWG 1-6 mm ²	18-6 AWG ⁽¹⁾ 1-16 mm ²
Coppia di serraggio Tightening torque	1,5 Nm 13,3 lb/in		

Utilizzare conduttori in rame (CU) a 60 °C / 75 °C, flessibili o rigidi

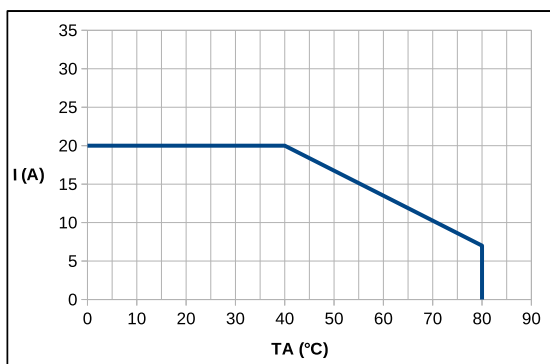
Use 60 °C / 75 °C copper (CU) conductor, stranded or solid

(¹) 6-8 AWG solo se abbinati a puntalini listed ZMVV mod. ANE2-U4 o ANE3-U4 assemblati tramite "Crimp die" MN2RF-50 o MN3RF-50 prodotti da Cembre Spa, o equivalenti.

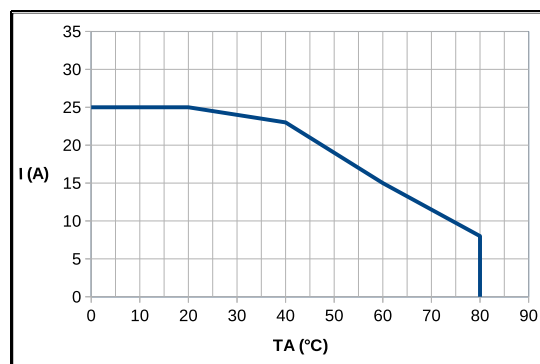
(¹) 6-8 AWG only when provided with Listed ZMVV Connectors, Cembre Spa Mod.No. ANE2-U4 or ANE3-U4 crimped with "Crimp die" Mod.No. MN2RF-50 or MN3RF-50, or equivalent.

CURVE DI DERATING - DERATING CURVES

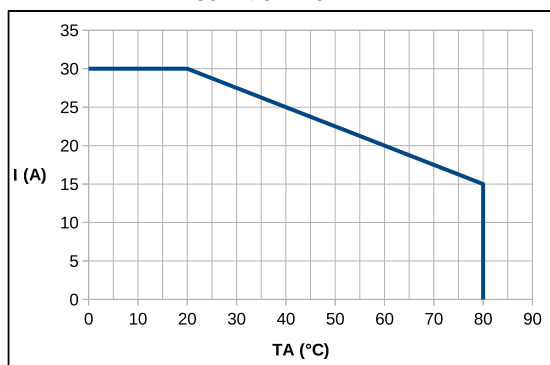
SSR170H-15xxx



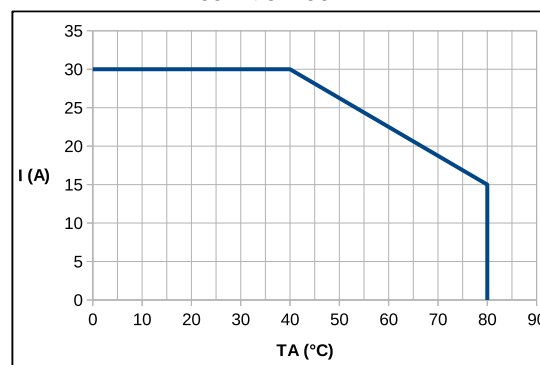
SSR170H-20xxx



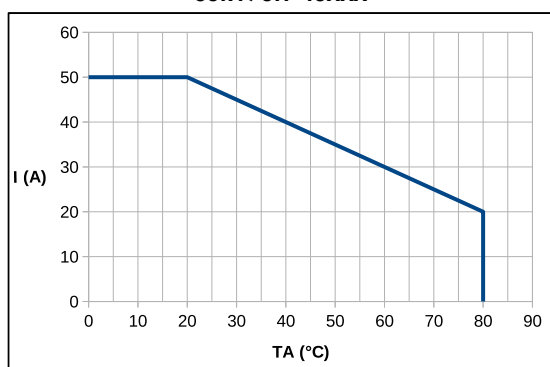
SSR170H-25xxx



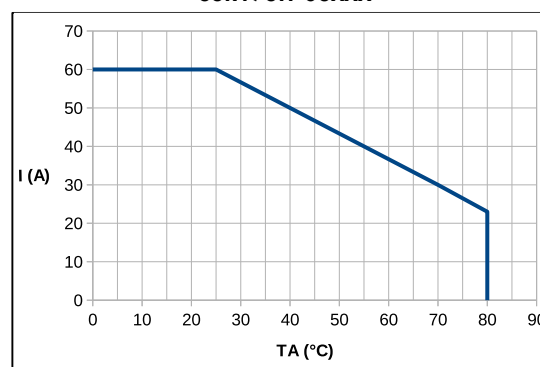
SSR170H-30xxx



SSR170H-40xxx

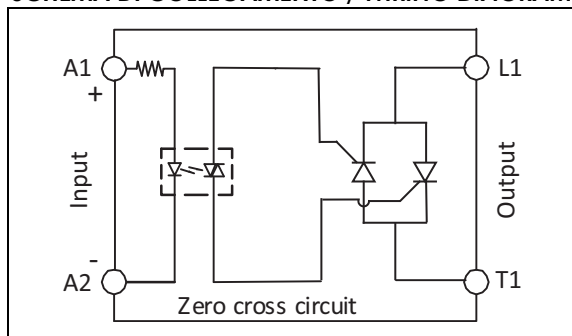


SSR170H-60xxx



In caso di più SSR montati fianco a fianco si deve considerare un derating della corrente di uscita.
In case of many SSR side by side, a derating of output current should be considered.

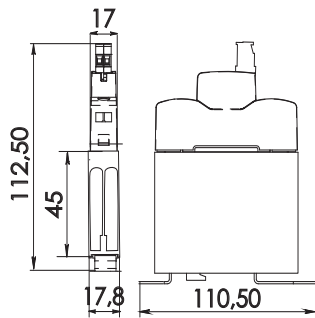
SCHEMA DI COLLEGAMENTO / WIRING DIAGRAM



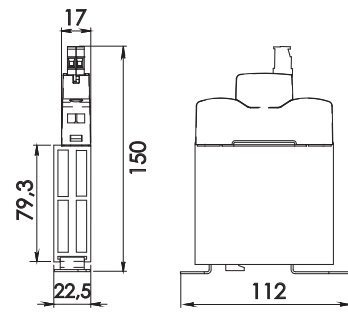


DIMENSIONI / DIMENSIONS (mm)

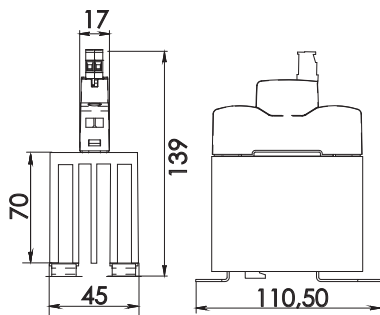
SSR170H-15/20/25xxx



SSR170H-30xxx



SSR170H-40xxx



SSR170H-60xxx

