

# Relais Statique pour circuit imprimé

## Solid State Relay for printed circuit board

# SN842x00

25A/280VAC output  
3.5-15VDC control

or

15-32VDC control

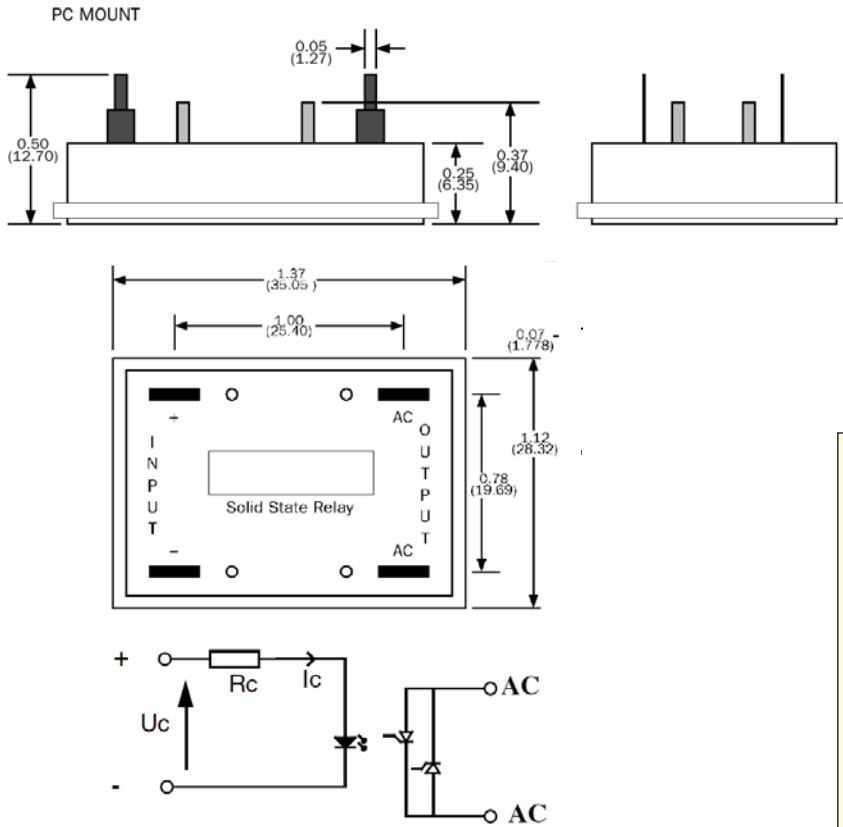
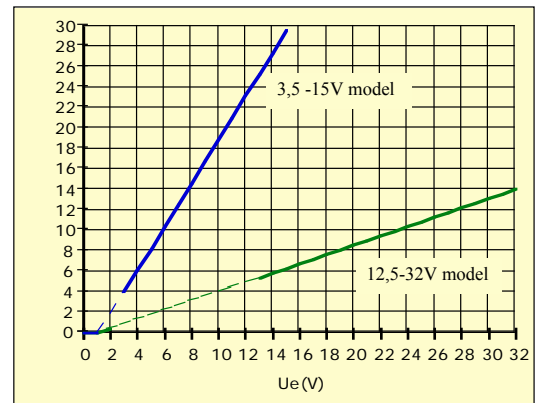


fig 1 : Control  $I_c = f(U_c)$



### Caractéristiques de commande (à 20°C) / Control characteristics (at 20°C)

Paramètre / Parameter	Symbol	DC			DC			Unit
		Min	Nom	Max	Min	Nom	Max	
Tension de commande / Control voltage	$U_c$	3,5		15	12,5		32	V
Courant de commande / Control current (@ $U_c$ )	$I_c$	5		30	5		14	mA
Tension de relachement/Release voltage	$U_{c\ off}$	1			1			V
Résistance interne / Input internal resistor fig.1	$R_c$		470			2200		$\Omega$
Tension inverse / Reverse voltage	$U_{rv}$		15			32		V

### Caractéristiques d'entrée-sortie (à 20°C) / Input-output characteristics (at 20°C)

Isolement entrée-sortie/ Input-output isolation @500m	$U_i$	4000			4000			V
Isolement sortie-semelle/ Output-case isolation @500m	$U_i$	4000			4000			V
Tension assignée isolement/ Rated impulse voltage	$U_{imp}$	4000			4000			V

### Caractéristiques générales / General characteristics

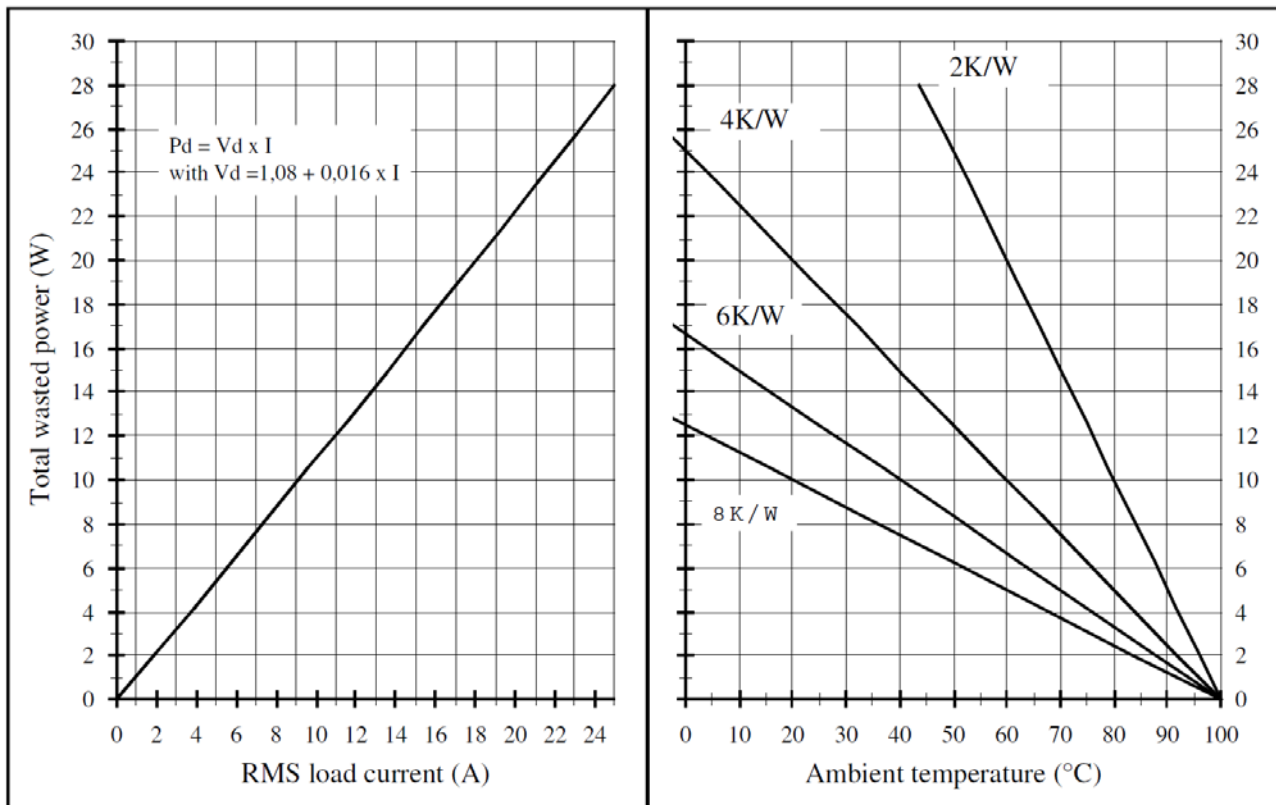
Paramètre / Parameter	Conditions	Symbol	Typ.	Unit
Poids/Weight			11,5	g
Plage de température de stockage / Storage temperature range			-40 / +100	°C
Plage de température de fonctionnement/ Operating temperature range			-40 / +100	°C

Proud to serve you

**Caractéristiques de sortie(à 20°C) / Output characteristics (at 20°C)**

Paramètre / Parameter	Conditions	Symbol	Typ.	Unit
Tension de charge / Load voltage		Ue	230	V rms
Plage tension de fonctionnement / Operating range		Ue min-max	24-280	V rms
Tension crête (écrêteur de tension) / Peak voltage (clamping voltage)		Up	600	V
Niveau de synchronisation / Synchronizing level		U <sub>sync</sub>	25	V
Tension d'amorçage / Latching voltage	Ie nom	Ua	10	V
Courant nominal AC-51/ AC-51 nominal current	( see Fig. 2 )	Ie AC-51	25	A rms
Courant nominal AC-53/ AC-53 nominal current				
Courant de surcharge non répétitif /Non repetitive overload current	tp=16,3ms (Fig. 3)	I <sub>tsm</sub>	250	A
Chute tension directe crête/ On state voltage drop	@ Ie nom	Vd	1,08 + 0,016 x I	V
Thermal resistance between junction to case :Rthj/c			0,7 (*)	K/W
Courant de fuite état bloqué/ Off state leakage current	@Ue, 60Hz	I <sub>lk</sub>	<1	mA
Courant de charge minimum / Minimum load current		Ie min	50	mA
Temps de fermeture/ Turn on time	Uc nom DC ,f=60Hz	ton max	8,3	ms
Temps d'ouverture/ Turn off time	Uc nom DC ,f=60Hz	toff max	8,3	ms
Plage de fréquence / Operating frequency range		f	47-440	Hz
dv/dt état bloqué / Off state dv/dt		dv/dt	500	V/μs
I <sup>2</sup> t (<10ms)	60hz	I <sup>2</sup> t	260	A <sup>2</sup> s

(\*) This product is built with a thermal pad, you have to take the thermal resistance of the contact (about 0,2K/W) into account.

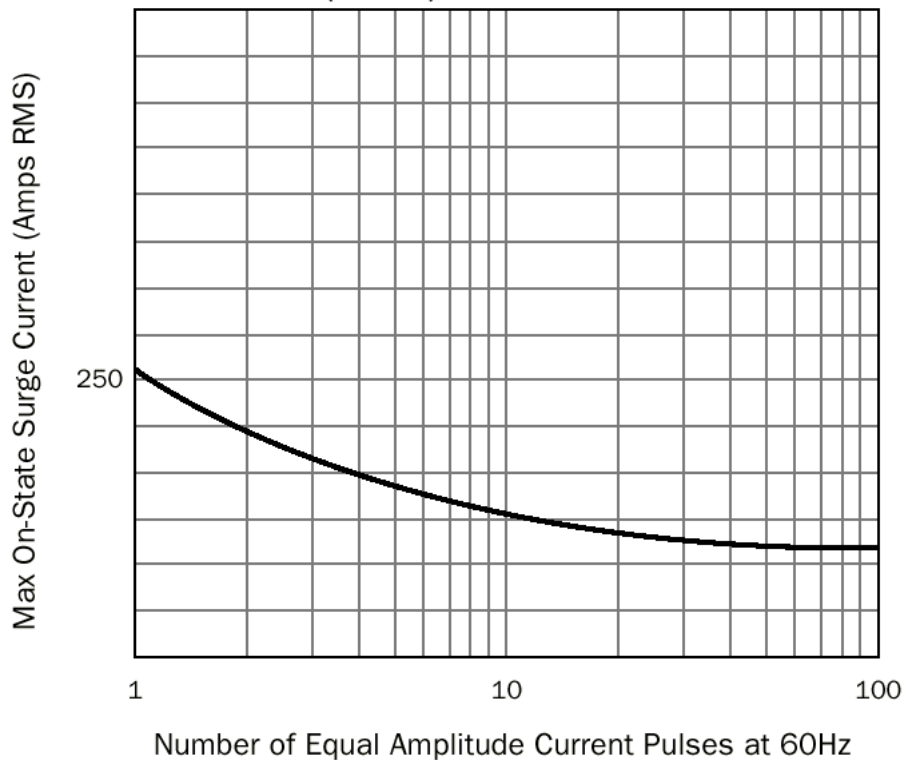


*Proud to serve you*

All technical characteristics are subject to change without previous notice.  
Caractéristiques sujettes à modifications sans préavis.

**celduc®**  
r e l a i s

**FIGURE 1 Max Non-Repetitive Surge Current**  
(Note 3)



**Voltage protection :**

An external voltage protection by VDR is advised in case of overvoltages on the mains.

The input of these relays is built with a current regulator . In case of overvoltages , the input can be damaged.

So don't put a coil of an electromechanical relay in parallel with the input without voltage protection.

