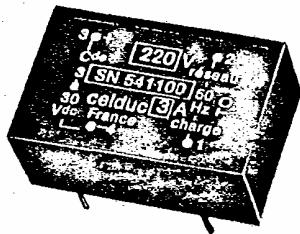


zero-crossing
celduc series SN5 relays are synchronous low power relays with output connectors for printed circuit board assembly, they will enable 3 Amps to be switched under a voltage rating of 24 to 240 Volts A.C.

Input/ Output coupling is by opto-coupler, this guarantees an isolation value of 2500 Vr.m.s
3 to 30 Vdc input for simple adaptation to the majority of all electronic control systems.



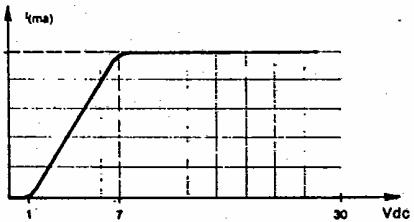
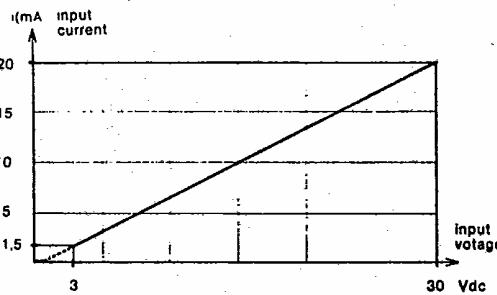
References

UL Approval - E69913

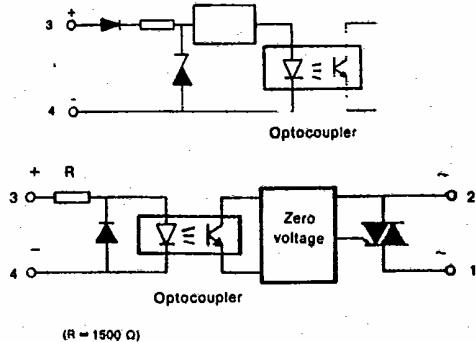
SN 5 x 1 x 00

	Network	Control
1	24 Vac	3 to 30 Vdc
2	48 Vac	$I \leq 5 \text{ mA}$
3	110 Vac	0
4	220 Vac	3 to 30 Vdc
		$R = 1500\Omega$
		1

Example of reference:
Mains voltage 220 Vac
Control voltage 5 Vdc ($R = 1500 \Omega$)
Refay reference : SN541100

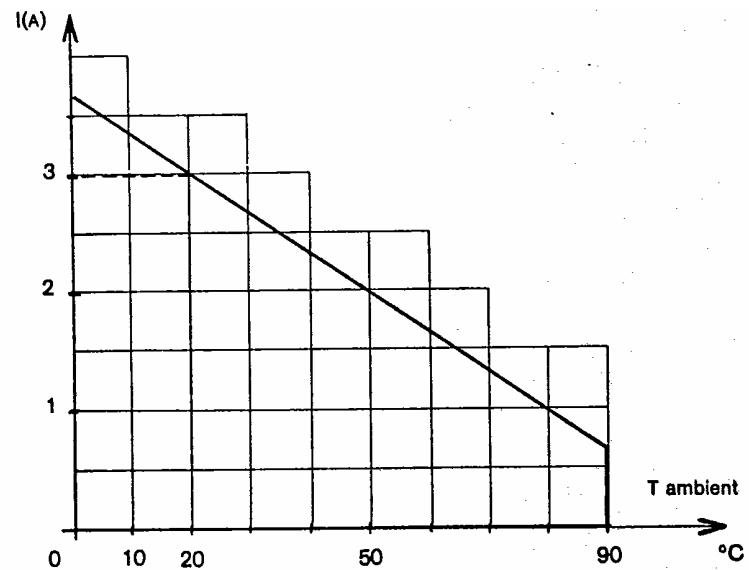


Equivalent diagram

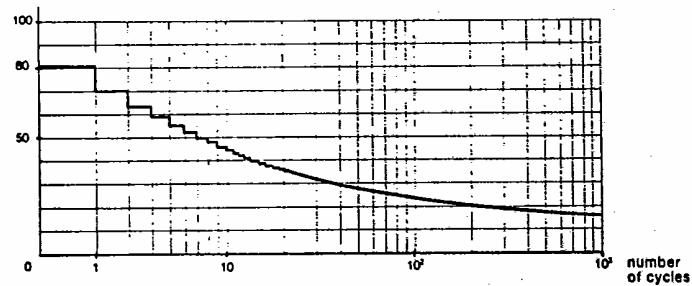


Input characteristics (at 20° C)	SN5 1000	SN5 1100	
Nominal voltage	3	3	Vdc
Maximum control voltage	30	30	Vdc
operating voltage	3-30	3-30	Vdc
Operating current	1.5	1.5	mA
Maximum control current	20	5	mA
Drop-out voltage	0.8	1	Vdc
Internal resistance R	1500	-	Ω
Output characteristics (at 20° C)			
nominal voltage *	220		Veff
Operating voltage range	24 to 280		Veff
Peak voltage	600		V peak
Synchronizing level	± 20		V peak
Nominal current (see curve I = I(B))	3		A
Accidental overload current (max.) (see curve I = I(n of cycles))	80		A peak
DC voltage drop (10 A)	1.1		Veff
Stray current in off-state (at U nominal 50 Hz)	6		mA
Internal RC network	no		
Holding current	50		mA
Turn-on time	1/2 cycle max. (zero voltage)		
Turn-off time	1/2 cycle max. (zero current)		
Operating frequency	10 at 440		Hz
dv/dt in off-state	200		V/μs
dv/dt commutating	5		V/μs
I ² t	24		A ² s
di/dt non repetitive	50		A/μs
di/dt repetitive	10		A/μs
General characteristics			
Storage temperature	-40 to +150		°C
Operating temperature	-40 to +90		°C
Input/ output isolation voltage	2500		Veff
Input/ output capacity	8		pF
Weight	20		g

* For the 24, 48 and 1100 Volt models, only the synchronization levels and stray currents are different (in proportion with the voltage).



$I(A)$ Peak acceptable accidental overload current
(Initial temperature of internal junction at 110°C)



DIMENSIONS

