High Current Relay 75

- Limiting continuous current 75A at 23°C
- Current switching ability up to 150A
- Suitable for voltage levels up to 24VDC
- Minimal contact resistance
- Dustproof versions

Typical applications

Engine control, glow plug, heated front- and rear - screen, preheating systems (e.g. for diesel engines, catalytic converters), switches for loading ramps, power distribution (clamp15)

Contact Data F	orm A bifurcate				
Contact arrangement	1 form A,	1 form A,			
	1 NO (bifurcated)	1 NO			
Rated voltage	12VDC	24VDC			
Max. switching voltage	depends on loa	ad parameter ^{A)}			
Rated current	50A at 12VDC	30A at 24VDC			
Limiting continuous current					
23°C	75A	50A			
85°C	50A	30A			
105°C	20A	8A			
Jump start test, ISO 16750-1	24VDC for 5 min,				
	conducting nomin	al current at 23°C			
Contact material	silver k	based			
Contact style					
NO bifurcated:	double make cor	ntact bifurcated			
NO:	single contact				
Min. recommended contact load	1A at	5VDC			
Initial voltage drop, typ. at 100A	<50mV	<100mV			
Operate/release time typ. at nomin	al voltage 7/2	ms			
Electrical endurance					
form A contact (NO), resistive lo	ad >1x10 ⁵ ops.	>5x10 ⁴ ops.			
	75A, 13.5VDC	50A, 27VDC			
Mechanical endurance	>1x10				
A) Please contact TE relay application eng	gineer.	÷			

Coil Data	Form A bifurcate	ed Form A	
Rated coil voltage	12/24	1VDC	
Rated coil power	3.1W	4.4W	
Max. coil temperature	155°C		

Coil versions, DC coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	W
0001	12	8.8	1.5	46	3.1
0002	24	19.0	1.0	130	4.4

All figures are given for coil without pre-energization, at ambient temperature +23°C

Insulation Data	
Initial dielectric strength	
between contact and coil	500VAC _{rms}
Load dump test	
ISO 7637-1 (12VDC), test pulse 5	Vs=+86.5VDC
ISO 7637-2 (24VDC), test pulse 5	Vs=+200VDC
Load dump test ISO 7637-1 (12VDC), test pulse 5	Vs=+86.5VDC



Other Data

Other Data	
Ambient temperature	-40°C to +125°C
Climatic cycling with condensation,	
EN ISO 6988	6 cycles, storage 8/16h
Damp heat cyclic,	
IEC 60068-2-30, Db, Variant 1	6 cycles, upper air temp. 55°C
Damp heat constant, IEC 60068-2-3	, Ca 56 days
Degree of protection	
dustproof:	IP54 (IEC 60529), RT I (IEC 61810)
sealed:	sealing in accordance with IEC 68
immersion cleanable:	IP67 (IEC 60529), RT III (IEC 61810)
Corrosive gas	
IEC 60068-2-42	10 days, 10 +/- 2cm ³ /m ³ SO ₂
IEC 60068-2-43	10 days, 1 +/- 0.3cm ³ /m ³ H ₂ S
Vibration resistance (functional)	
IEC 60068-2-6 (sine sweep)	10-500Hz, > 5g ¹⁾
Shock resistance (functional)	
IEC 60068-2-27 (half sine)	11 ms >20g ¹⁾
Cover retention	
pull force	200N
push force	200N
Terminal retention	
pull force	100N
push force	100N
torque	0.3Nm
Weight	38g (1.3oz)
Packaging unit	50 pcs.
4) N	

1) No change in the switching state $>10\mu s$.

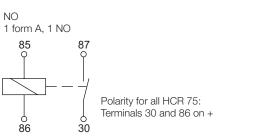
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Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.

High Current Relay 75 (Continued)

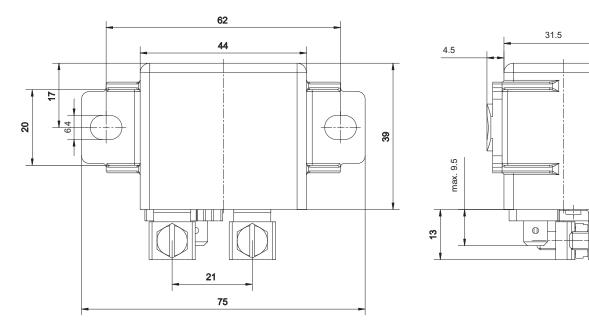
Terminal Assignment



NOBI 1 form A (double make contact), 1 NO (bifurcated)

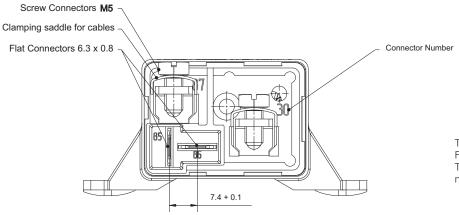


Dimensions



View of the terminals

Bottom view



Torque on each M5 screw must be ≤ 2.8 Nm. Fitting connector for coil terminals 85 and 86 is Tyco Electronics' 2 way FF receptacle housing part number 180907.

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High Current Relay 75 (Continued)

Product	t co	de structure			Typical product code	V23232	-A	0001	-X001
1100000					Typical product code	VLOLOL	~		7,001
Туре									
V2	2323	2 High Current Relay 75							
Contact a	arraı	ngement							
Α		1 form A, 1 NO	D	1 form A, 1 NO (bifurcated)					
Coil								-	
00	001	12VDC	0002	24VDC					
Contact a	arraı	ngement index							
XC	001	1 form A, 1 NO at 12VDC (bifurc	ated)						
XC	800	1 form A, 1 NO at 24VDC							

Product code	Arrangement	Coil	Circuit	Coil suppr.	Protection (Cont. material	Terminals	Part number
V23232-D0001-X001	1 form A, 1 NO (bif.)	12VDC	NOBI		IP54	Silver based	Screw	1904000-1
V23232-A0002-X008	1 form A, 1 NO	24VDC	NO					1904001-4
This list represents the most common types and does not show all variants covered by this datasheet.								

Other types on request.

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