

Interface relay / Contactors board / Pulse or frequency duplicator / Pre-wired PLC outputs

Type : IRL



- **Standard interface : 1, 2, 4, 8, 16 or 32 relay**

PLC interface

Wiring :

- screw or spring terminal blocs,
- SUBD, HE10, ...



<- IRL16 ->

- **IRL25-2 :** Pulse duplicator
Frequency duplicator

- **SIL2 option :** with guided contact safety relay according to EN50205



<- IRL25 ->

- **Interface relay board or specific contactors:**

Electromechanical or solid state relays

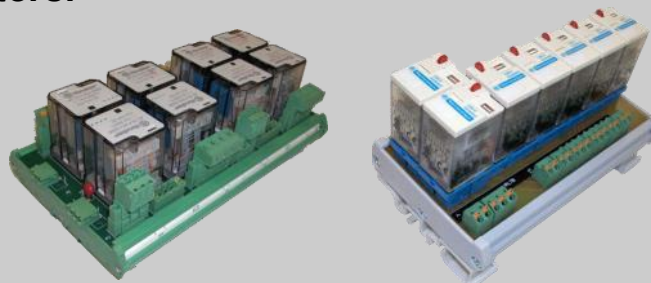
up to 50A on PCB

according to users specifications

No minimum quantity

power interface for machines

coil voltage up to 127Vdc / 400Vac



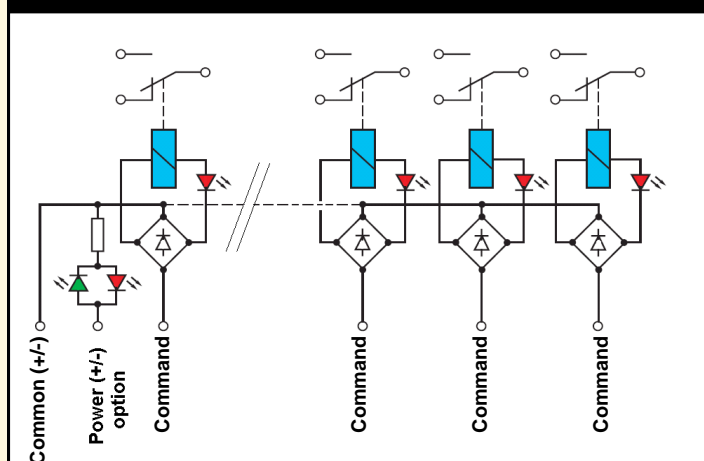
This interface relays boards are designed to replace contactors system or wired relays in cabinet, making possible to reproduce at lower cost, specific interface schemes to control machine, motor, oven, or any industrial plants .

Description

- Plastic profile (70mm or 100mm) for symmetrical or asymmetrical DIN rail mounting
- Wiring on fixed or pluggable terminal blocs, screw or spring terminals blocs (up to 16 mm² section)
- Wiring of relay command screw terminal blocs (1.5 mm² section), SUB-D 37 pins, HE10,... depend of applications specific link cable provide on request
- Led for outputs state
- up to 6kV Galvanic isolation
- Electromechanical or solid state relay
All voltage command of relay available
- Protected against reverse polarity (or automatic polarity)
- Total immunity to electromagnetic fields
- High vibration resistance
- Conformal coating
- Available version for analog signals switching
- SIL2 version:
Ideal for using in safety systems of production industries.
4 pole relay or 6 pole relay available.
Strengthened isolation between coil and contacts.

Synoptic of one standard IRL interface relay

May be changed with specific demand



Version and order code:

[Request a quote](#)

- IRL25-1 DIN rail mounting, 1 input 12V,24V,48V / 1 SPDT contact relay 1A
- IRL25HV-1 DIN rail mounting, 1 input 115V, 127V / 1 SPDT contact relay 6A
- IRL25-2 DIN rail mounting, 1 command input / 2 output relays N.O
- IRL25-2S DIN rail mounting, 1 command input / 2 MOS output N.O
- IRL25-2ST DIN rail mounting, 1 command input / 2 transistor output N.O
Solid state relay 60V / 0.5A 250 Hz max or transistor 40V/50mA 10KHz
(application: pulse or frequency duplicator)

IRLxx yyy xx : number of relays (de 4 to 32) DIN rail profile mounted
yyy : code assigned by LOREME to customer*

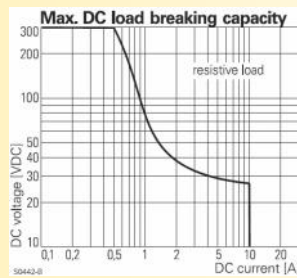
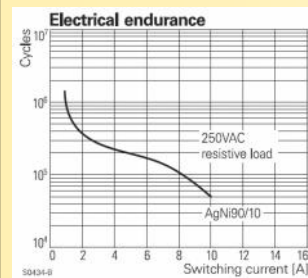
Option SIL2 with guided contact relay in accordance to EN50205

**SPECIFICATION
(standard version)**

Mechanical life : 30 x 10⁶ ops.
 Full loaded life : 60 x 10³ ops.
 Switching rate (no load): 72000 ops./h
 Switching rate (loaded): 3000 ops./h
 Operate time: 7 ms
 Release time: 8 ms
 Bounce time: 2 ms
 Isolation resistance: > 10⁴ Mohms at 500 V

CONTACTS

Nominal voltage: 250 VAC
 Max switching voltage: 440 VAC
 Nominal current: 8 A (peak 16A)
 Nominal switching power (resistive load): 1500 VA



POWER SUPPLY

5...12...24...48...110...127 Vdc (170mW per channel)

COIL

Nominal power consumption: 170mW
 Nominal voltage: on demand
 Holding voltage: 0.4 UN
 Drop-out voltage: 0.1 UN
 Nominal current: 0.17 / UN
 Coil resistance:(+/- 15 %) UN² / 0.17

ENVIRONMENT

Dielectric strength: coil / contact: 4000 VCA
 contact / contact: 1000 VCA
 Operating temperature: - 40 ... +70 °C
 Storage temperature: - 40 ... +85 °C
 Humidity: (not condensed) 85 %
 Weight: < 1000 g model dependant
 MTBF (+25°C) >1 000 000 hours

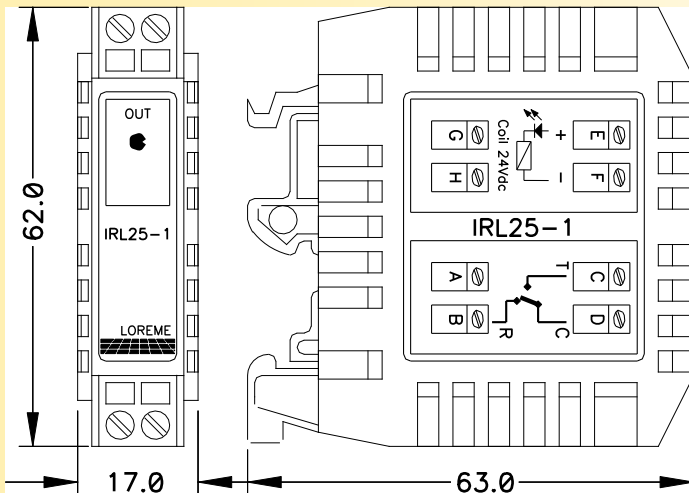
Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	

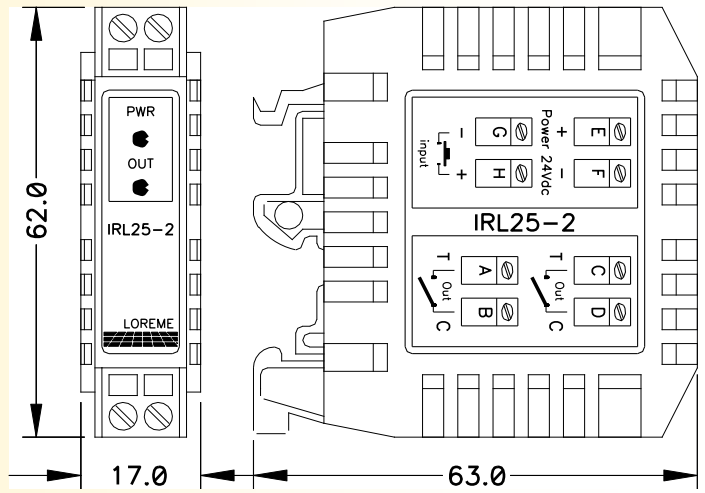


WIRING AND OUTLINE DIMENSIONS (example of executions)

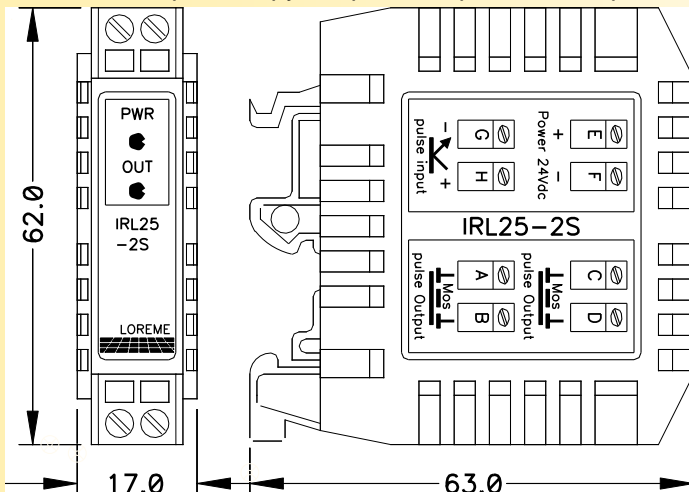
IRL25-1 Low consumption interface relay (5mA)



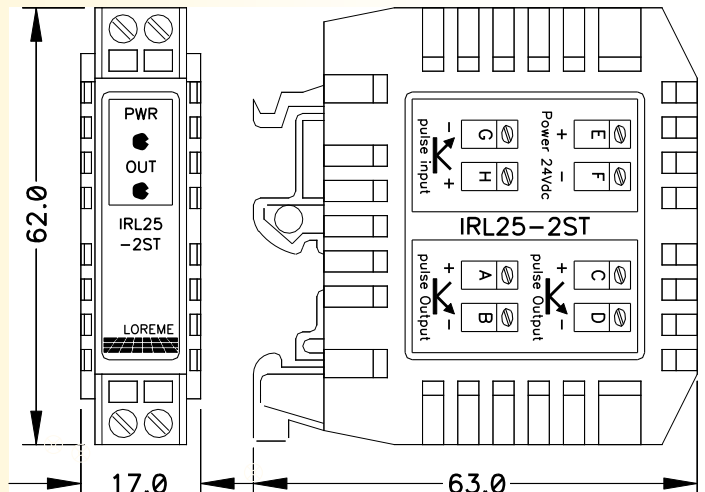
IRL25-2 pulse copy / duplicator relay output



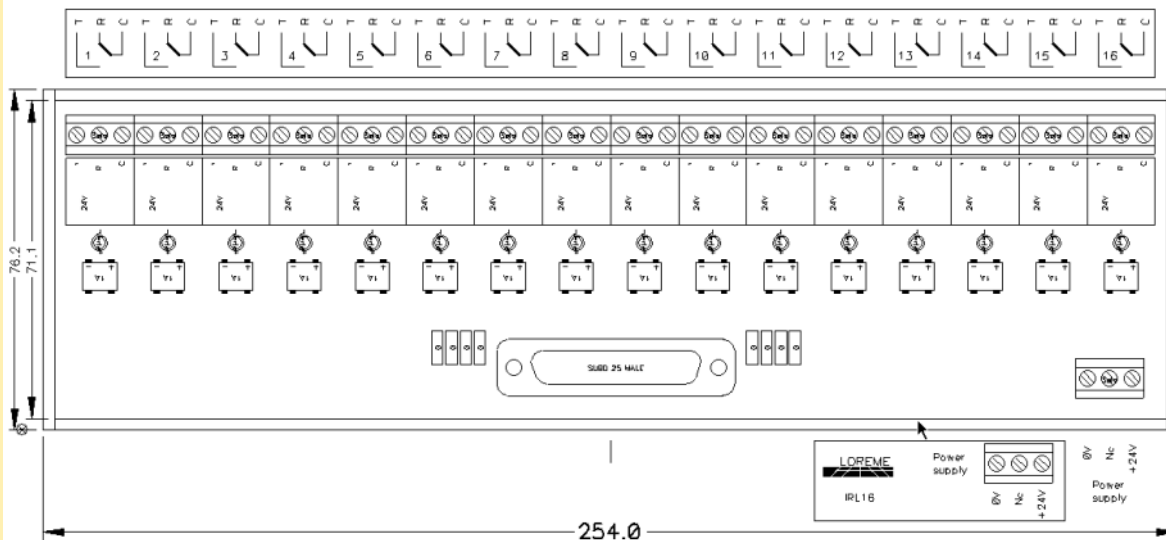
IRL25-2S pulse copy / duplicator opto-MOS output



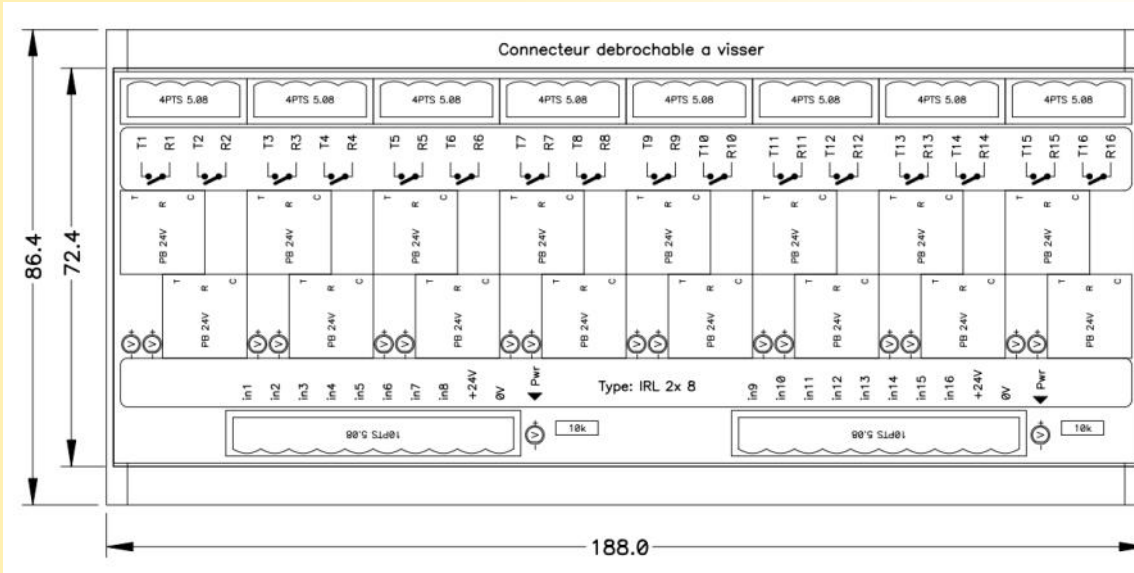
IRL25-2ST pulse copy / duplicator opto-transistor output



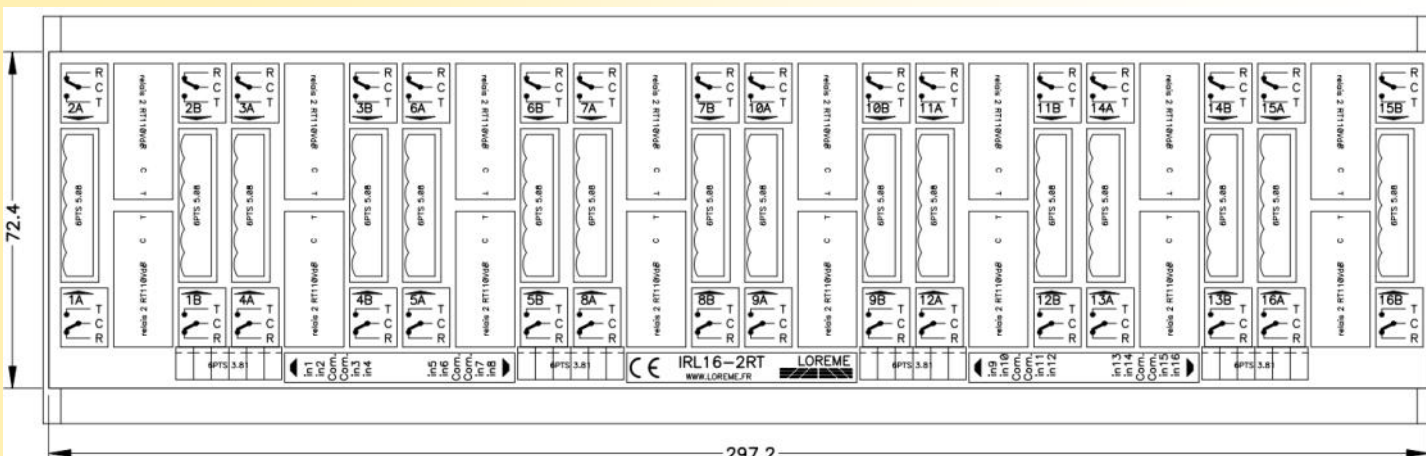
IRL16-RT : 16 relays version. 10A changeover contacts, screw terminals blocs and commands input on SUBD25



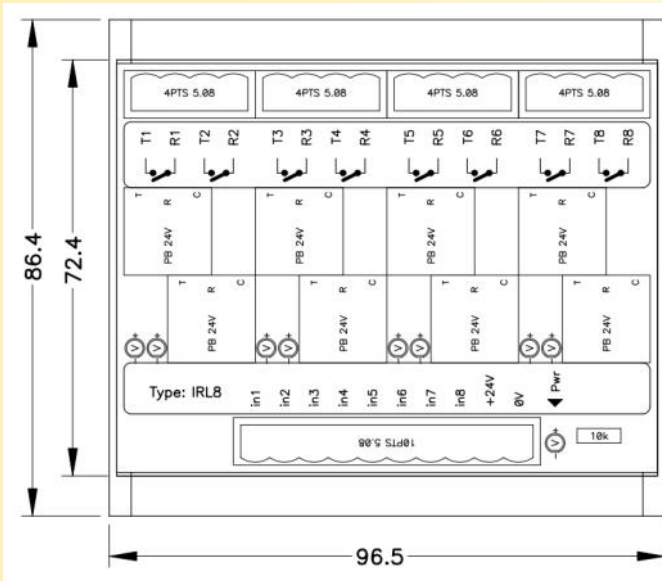
IRL16 : 16 relays version. 10A N.O contacts, pluggable terminal blocs



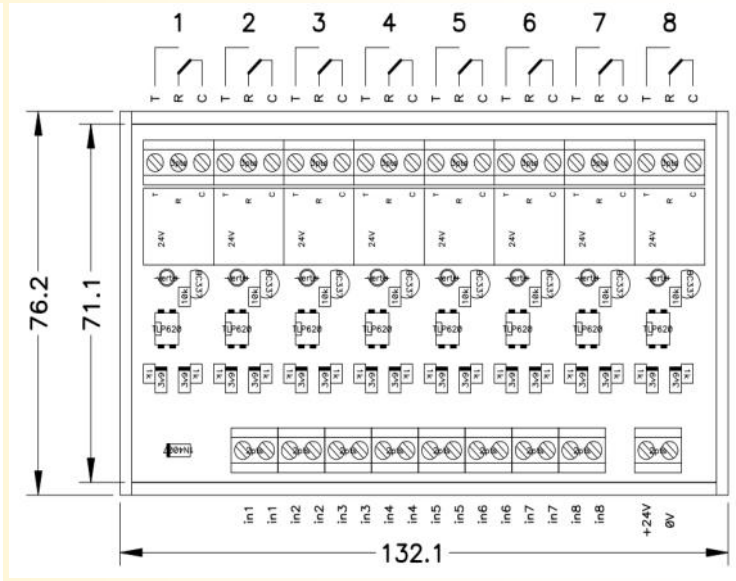
IRL16-2RT : 16 relays version. double 8A changeover contacts, pluggable terminal blocs



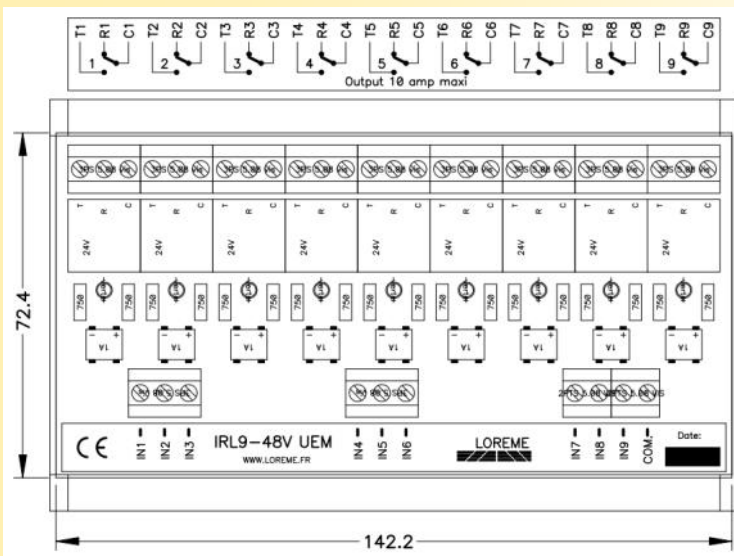
IRL8 : 8 relays version. 10A N.O contacts, pluggable terminal blocs



IRL8 : 8 relays version. 10A changeover contacts, fixed connectors



IRL9 : 9 relays version. 10A changeover contacts



IRL32 : 32 relays version. 8A N.O contact

