INSTRUCTION MANUAL Code 287S.B

Working principles
The code 287S board is a MOSFET mono-directional voltage switching regulator. Its main use is found in control of small DC motors or proportional electro-valves with a maximum working voltage of 24VDC.
When used as POWER SUPPLY UNIT, the minimum load must be 100mA. If lower, it is useful putting one 300ohm 10W resistance between the output connectors.

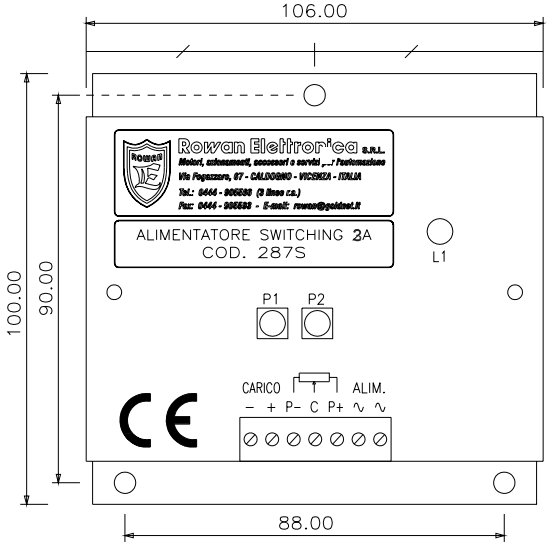
TECHNICAL CHARACTERISTICS:

Power supply 24VAC ± 10% - 50-60Hz from transformer or 24VDC ± 10% from batteries.
Maximum power 70W at 24VDC
Maximum current in continuous service 3A. (this may be limited by internal trimmer P2)
Room temperature air limits -5°C + 40°C
Storage temperature limits -25°C +70°C
Relative non condensate humidity from 5% to 95%
Output voltage can be regulated from 0V to maximum 24VDC (this is may be limited by internal trimmer P1)
Voltage regulation by means of a 10KW potentiometer or 0 ÷ 10VDC signal (S1 microprocessor Open)
Voltage variation maximum 5% from unloaded to nominal loaded
½ Europe board formation in standard version on a plate support IP20 protection

CONFORMITY TO ELECTROMAGNETIC COMPATIBILITY REQUIREMENTS
The code 287S board conforms to the EMC 89/336/EEC (electromagnetic compatibility) with reference to the limits and to the test conditions and product regulations CEI EN 61800-3 for electric drives; such conformity is guaranteed if the following precautions are observed:
- screened cables must be used for the potentiometer and motor connection;
- must be avoided passing signal cables in channels together with power cables ;
- one end of the screened cable shield must be connected to earth;
The code 287S is supplied with an internal electromagnetic disturbance suppression system, **therefore no external filter is necessary.**

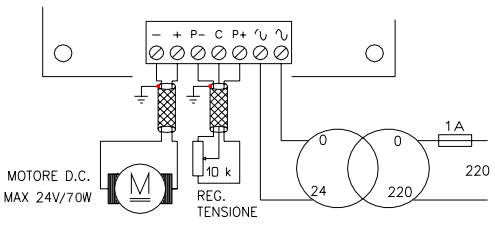
CONNECTION AND SET-UP INSTRUCTIONS
The code 287S board works correctly at room air temperature between -5°C and +40°C; over these limits, abnormalities may accour as thermal drifts or breakages; it is advisable to position the board away from heat sources and to ventilate the cabinet if high environment temperatures are reached.
IMPORTANT!: The P- NEGATIVE is not decoupled so, pay attention to:
1) not connecting to earth one end of the 24VAC supply together with the P- of the drive;
2) avoid to connect together the P- of several drives when they are supplied by the same transformer (example: speed common SET of 0÷10V from PLC); in this case, the different characteristics of the internal rectifier bridges may create some currents on the connection causing the possibility that one drive get overloaded.

CONNECTION DIAGRAM – COMPONENTS SERIGRAPH - OVERALL DIMENSIONS AND FITTINGS



L1 power on
P1 maximum voltage regulation
P2 maximum current regulation (factory set)

INPUTS
P- C inputs 0 / 10V
P- C P+ potentiometer input
I reg. 0÷10Vdc for external current regulation, internally selectable by S1 microswitch (open)



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