Terminals
Available into an IP65 terminal box on threaded nickeled brass bolt

Mechanical characteristics
IP23, Naked wirewound resistor in galvanized steel enclosure

Applications
Dynamic braking, Neutral grounding, Starting motor, Load banks

Market
Industrial Automation, Energy

Available enclosure
IP20, AISI 304, AISI 316L marine enclosure

Options
Thermal switch, Multiple sections, Three phase

RX

CE RoHS COMPLIANT Pb Pb-Free

3 ÷ 120 KW

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ELECTRICAL CHARACTERISTICS

ONE MODULE

refers to room temperature 25°C

ID	Rated Power	Min resistance	Max resistance	Limit Voltage
Unit	kW	Ω	Ω	V
RX 21S	3 ÷ 5	0.27	130	1500
RX 35S	6 ÷ 10	0.13	270	1500
RX 50S	12 ÷ 16	0.091	390	1500
RX 65S	18 ÷ 25	0.062	560	1500

TWO MODULES

RX 50M	30÷35	0.091	390	1500
RX 65M	40÷45	0.062	560	1500
RX 80M	75÷90	0.062	560	1500

THREE MODULES

RX 65L	50÷70	0.062	560	1500
RX 80L	100÷120	0.062	560	1500

Continuous rated power refers to external surface temperature of 320°C	Insulation resistance (1000 VDC) ≥1000 MΩ
Max Overload 5 x Rated power for 10" or 10 x Rated power for 5"	Dielectric strength (50Hz 60") 2500 V

Temp. Coefficient Resistance: low ohmic value are made with active material CuNi44 that has a TCR of 40 ppm/°C, whereas high ohmic value refers to wire material FeCrAl that has a TCR of 70 ppm/°C. Resistors can be made also with NiCr alloys with TCR between 70 and 240 ppm/°C.
RX internal elements are typically naked wire wound resistor like RMS of RHP.
Very low ohmic value can be made with grids or metal plates. In this case the TCR can be between 500 (AISI310S) and 1200 (AISI430).
Standard model housing is galvanized steel.
Standard tolerance on ohmic value is ±10%.
Picture above refers to RX 50M.

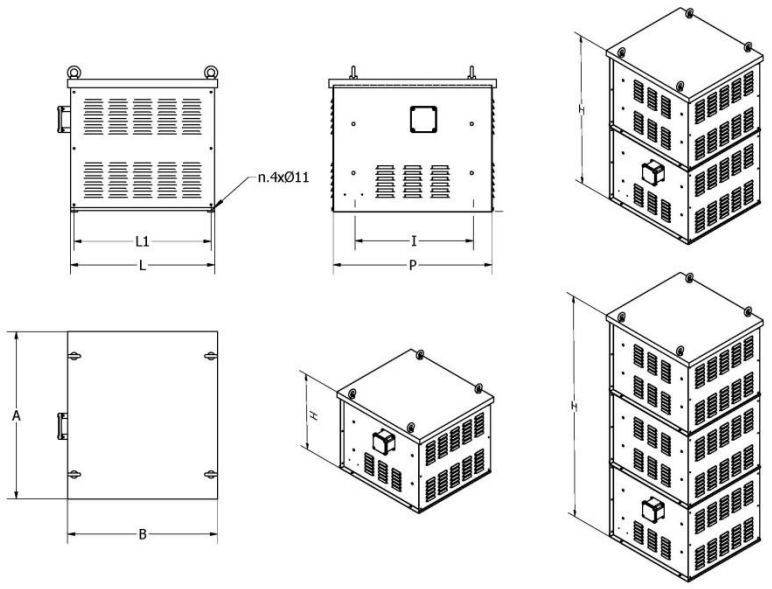
FAIRFILD SRL – Via Eching, 12 20090 Trezzano sul Naviglio (MI) Italy – C.F. 03539970156 – P.ta Iva IT02736630167 – REA MI 1630934 – C.S i.v. 45.900 €

MECHANICAL DATA

ID	A [mm]	B [mm]	H [mm]	I [mm]	L [mm]	L1 [mm]	P [mm]	Max weight [kg]
RX 21S	580	230	460	410	210	185	550	14.5
RX 35S	580	370	460	410	350	325	550	21.6
RX 50S	580	520	460	410	500	475	550	31.4
RX 65S	580	670	460	410	650	625	550	41.2
RX 50M	580	520	900	410	500	475	550	61.3
RX 65M	580	670	900	410	650	625	550	80.3
RX 80M	630	820	900	410	800	775	600	200
RX 65L	580	670	1340	410	650	625	550	121
RX 80L	630	820	1340	410	800	775	600	300

DRAWING

Unless otherwise specified, applicable standard of general tolerances for linear and angular dimensions is ISO 2768-1 class c.



50M, 65M, 80M

65L, 80L

Overload conditions

Metal box resistors are mostly used for overload operation, such as dynamic braking of VFD or emergency stop.
For pulses of duration less than 60 s, the mass of the wire must be taken in account to define the admissible overload. The mass of the wire depends on the ohmic value.

Fairfild technical office is at your disposal for further detailed information and for detailed calculation of the best solution.

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Marking

The resistor is marked on a name plate screwed on the front panel
FAIRFILD – RX 65S 10kW 2R 10% WW/YY (week / year) 2500 V

Installation

Warning: Units must be mounted with at least 100 mm of available space from the bottom.

Packing

The resistor is packed in a way to preserve incidental damages due to transport.

Disclaimer

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Ordering information

RX/Y XXX WWW RRRR 10%
Y T : External thermal switch 160±5°C (rated voltage: 250 V; rated current: 16 A; leads available in clip)

XXX Model 21S, 35S, 50S, 65S, 50M, 65M, 80M, 65L, 80L

WWW Wattage

RRRR Resistance value (nominal at 20°C)

Example
RX/T 50S 12 kW 15R 10%
RX is the name of the product
T means the clixon is provided with the resistor
50S is the model
12 kW is the wattage
15R means 15 Ω that is the nominal ohmic value at 20°C

10% is the tolerance on the ohmic value, in this case the value of the resistor is accepted when is within 13.5 Ω ÷ 16.5 Ω

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