RT / RL





SEAM WELDERS

This range of resistance machines permits the joining of metals by a sequence of welds, made one after the other, achieved by the rotation of copper alloy discs. These welders allow either longitudinal or transversal seamwelding - also water tight - of cylindrical containers, fire extinguishers, radiators, heaters, tanks, filters and similar items with excellent quality results. Customised equipment are built to fully meet any specific welding need: also D.C. three phase supply and/or D.C. Medium Frequency (1000 Hz) three phase inverter versions are available on request. In particular Medium Frequency seam welders enable extremely high quality welds at greatly increased welding speeds and represent the ideal solution for joining thin sheets and/or filter nets with very contained deformations. Seam welding is a welding process by electric resistance. In such joining process overlapped metals are welded under pressure by a sequence of spots made by copper alloy rotating discs. Depending on the choice of the parameters, such as spot frequency and rotation speed of the electrodes, two typical joints are usually achieved.

- ▶ Fig. A represents the welding pattern made by choosing a short welding time with a long pause time. This is for joining two metals without water tight welding.
- Fig. B shows the welding pattern made by adjusting welding and pause times in a way that each spot is overlapped by the next one. This joint allows water tight welding.

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- ▶ RT version for transversal welding only
- ▶ RL version for longitudinal welding only
- ► Water cooled seam heads with silver contacts, ensuring a good current transmission from the static part to the shaft
- ▶ Reduced maintenance costs
- Self-lubricated pneumatic components to eliminate oil deposits and to safeguard the environment from contaminants
- Frequency converter to adjust the welding speed of the discs



RL





TECHNICAL DATA		RT				RL
		80	80 2T	81	180 2T	81
Single phase input 50/60 Hz	V	400	400	400	400	400
Rated power at 50%	kVA	60	60	80	180	80
Installed power	kVA	60	60	80	180	80
Delayed fuse	А	150	150	200	400	200
Open Circuit Voltage	V	5,1	5,1	6,7	9,5	6,7
Arm length	mm	450	450	800	450	800
Work stroke	mm	80	80	80	100	80
Max. disc force 600 kPa (6 bar)	daN	470	470	470	1200	470
Water consumption at 300 kPa (3 bar)	l/min	6	6	6	7	6
Welding speed	m/min	0,6 - 4,2	0,6 - 4,2	0,6 - 4,2	0,8 + 5	0,6 - 4,2
Max. welding capacity on mild steel	mm	1,2 + 1,2	1,2 + 1,2	1,2 + 1,2	2 + 2	1,2 + 1,2
Max. welding capacity on stainless steel	mm	1,5 + 1,5	1,5 + 1,5	1,5 + 1,5	3 + 3	1,5 + 1,5
Dimensions	🗖 mm	1150	1150	1450	1450	1450
	→ mm	800	800	800	800	800
	↑ mm	2020	2020	2100	2100	2100
Weight	kg	800	800	900	1540	900
Drive head		А	A + B	В	A + B	В
Driving system		C	E	D	E	D

Drive head

A = Iower

B = upper

Driving system

C = toothed belt

D = direct with Hooke's joint

E = Differential

Other voltages on request