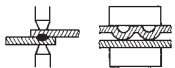


DALEX

WELDING TECHNOLOGY



A
SPOT
Welding machine



B
SPOT/PROJECTION
Welding machine



C
PROJECTION
Welding machine



fig. PMS 10-4 T in model A
as spot welding machine

TECHNICAL DATA

Power rating at 50 % d.c:	16 or 32 kVA
Throat depth:	200, 350 or 550 mm
Electrode force:	65 -390 daN or 20-390 daN
Electrode stroke:	max. 65 mm Hub

TECHNICAL DETAILS

- machine frame and transformer form one unit
- non-distortion construction of the arms with welding fittings
- close coupling of the secondary circuits with good performance factor
- special electrode force cylinder with precision guide and external rotational protection
- electrode force can be infinitely regulated in pressure-reducing valve
- speed of working and return strokes of the cylinders can be regulated separately via throttle
- welding transformer fitted with water cooling and with thermal protective switch
- primary and secondary coils are vacuum cast
- lower arm made from solid cast brass, height infinitely adjustable
- 8-step switch as standard for power regulation, and compressed air service unit, consisting of pressure filter, regulator and manometer

EXTRA EQUIPMENT

- double stroke cylinder (DH), 45 + 20 mm Hub (not with model C)
- double stroke cylinder with travel for working stroke (DHZ), 0 - 45 mm working stroke + 20 mm operational stroke (not with Model C)
- cylinder with extended force range 20 - 390 daN, 65 mm stroke
- current-free touchdown of upper electrode via double-foot pedals (only with models A-EH)
- machine table with stainless steel top
- stainless steel worktops left and right
- pressure-compensating tool with rubber springs to compensate the workpiece tolerances and inaccuracy of the tools. Rapid and powerful repetition of movement of upper tool when welding
- connecting cable set between machine and control unit, standard length of primary and control leads ca. 3000 mm
- synchronised thyristor control as slide-in option

PMS 10-4 T

Resistance Welding machine

Resistance Welding machine Type PMS 10-4 T

TECHNICAL DATA acc.to DIN 44753

valid for machines model A				Table spot welding machine					
Technical data for model B and C upon request				PMS 10-4 T / 16 kVA			PMS 10-4 T / 32 kVA		
Group	Throat depth ⁷⁾	mm	200	350	550	200	350	550	
Electrical Part	Machine Power	Power rating (50 % d.c.)	kVA	16			32		
		Continuous output	kVA	11,3			22,6		
		Maximum short-circuit power	kVA	80	69,3	62,9	160	150	101
		Maximum welding power	kVA	64	55,4	50,2	128	120	81
	Machine voltage	Secondary idling voltage	V	3,6(1,8/2,0/2,2/2,4/2,7/3,0/3,3/3,6)			4,6(2,3/2,7/3,1/3,4/3,7/4,0/4,3/4,6)		
		Number of regulating steps		8			8		
	Mains connection	Rated primary voltage	V	400			400		
		Rated frequency	Hz	50			50		
		Supply power	kVA	48	41,6	37,7	96	90	60,8
		Fusing (carrier) ¹⁾	A	50	36	36	63	63	50
		Wire range ⁶⁾	mm ²	6			10		
	Secondary current	Rated operating current	kA	4,16	4,12	4,1	6,8	6,6	6,38
		Permanent current ⁴⁾	kA	2,94	2,91	2,9	4,8	4,65	4,51
		Short-circuit current	kA	20,7	17,8	16,3	34,4	30	20,2
		Highest welding current	kA	16,6	14,2	13,1	27,5	24	16,2
		permit. duty cycle at highest weld. cur.	%	3,2	4,3	5	3,0	3,75	7,8
Mechanical Part	Cylinder EH	Electrode stroke max.	mm	65			65		
		Electrode force min. / max.	daN	65-390 i.e. 20-390 ⁸⁾			65-390 i.e. 20-390 ⁸⁾		
		Max. movements / 10mm stroke	min ⁻¹	400			400		
		Air consumption / 1000 strokes ⁵⁾	m ³	0,65			0,65		
	Cylinder DH, DHZ	Electrode stroke max. work str. + op. str.	mm	65 / DH = 45 + 20 / DHZ = 0 - 45 + 20 - 65					
		Electrode force min. / max.	daN	65-390 i.e. 20-390 ⁸⁾			65-390 i.e. 20-390 ⁸⁾		
		Max. movements / 10mm stroke	min ⁻¹	400			400		
		Air consumption / 1000 strokes ⁵⁾	m ³	0,75			0,75		
	Spot mounting "A"	Throat gap min. / max.	mm	50/130			50/30		
		Electrode arm-Ø	mm	45			45		
		Electrode holder-Ø	mm	20			25		
		Electrode holder adjustability	mm	135			135		
	Projection mounting "B" and "C"	Clamping plate length x width	mm	100 x 100		---	100 x 100		---
		Clamping plate sep. min. / max.	mm	50/210		---	50/210		---
		T-grooves / separation mm x no.	mm	8 DIN 650/63 x 2		---	8 DIN 650/63 x 2		---
	Comp. air	Pipe connection.		NG 13 - G½			NG 13 - G½		
Operating pressure min. / max.		bar	6/10			6/10			
Cooling water	Pipe connection in / out		NG 10 - G 3/8			NG 10 - G 3/8			
	Operating pressure min. / max. ¹²⁾	bar	2/5			2/5			
	Consumption at max. loading	l/min ⁻¹	4			4			
Machine dimensions	Width x depth x height ¹⁰⁾	mm	1100 x 805/955/1155 x 1270			1100 x 805/955/1155 x 1270			
	Weight machine / cabinet ⁹⁾	kg	165/170	175/180	185/190	190/195	200/205	210/215	
Shipping data	Gross weight ⁹⁾	kg	325	355	385	350	380	410	
	Box: Width x depth x height ¹¹⁾	mm	625 x 905/1055/1255 x 1600			625 x 905/1055/1255 x 1600			
	Volume	m ³	0,9	1,1	1,3	0,9	1,1	1,3	
Op. Part	Welding values	Sheet steel C-content < 0,2 % ²⁾	mm	5 + 5	4 + 4	3 + 3	7 + 7	6 + 6	5 + 5
		Brass sheet ³⁾	mm	3 + 3	2 + 2	1 + 1	4 + 4	3 + 3	2 + 2
		Aluminium sheet ³⁾	mm	1 + 1	0,8 + 0,8	0,5 + 0,5	2 + 2	1,5 + 1,5	0,8 + 0,8
		Round steel Ø C-content < 0,2 % ²⁾	mm	16 + 16	14 + 14	12 + 12	20 + 20	18 + 18	16 + 16
Power stage	Thyristor power stage	IW	1/60 L			1/60 L			
Notes	Technical alterations reserved. The table contents refer to standard models.								
	1) operation class gL 2) with max. transformer level 3) at operating pressure 6 bar, stroke 20 mm 4) DH + 5 kg, DHZ + 6 kg, DHZF + 8 kg 5) subject to size influences	6) excl. switching cabinet, width = 502 mm 7) excl. thyristor power stage 8) actual throat depth = version B and C - 10 mm 9) special models with extended electrode force range	10) special models with increased electrode range 11) increased electrode force range + 5 kg 12) for special equipment with step switching 13) cable length < 15 m						