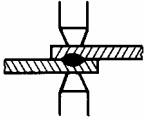


DALEX

WELDING TECHNOLOGY



A

rapid –
SPOT welding machine
Spot mounting with foot switch and extending
electrode holder, closed cooling system



fig. Series PL

TECHNICAL DATA

PL 40/63

PL 80/100

Power rating at 50 % d.c:	40 kVA/ 63 kVA	80 kVA/ 100 kVA
Secondary short-circuit current	26,2 kA / 31,5 kA	35 kA / 41,5 kA
Throat depth (inf. adjustable)	250 - 550 mm	350 - 650 mm
Throat gap:	150 oder 310 mm	160 oder 360 mm
Electrode force:	100 - 600 daN	100 - 600 daN
EH - cylinder	max. 65 mm Hub	max. 90 mm Hub

TECHNICAL DETAILS

- switching cabinet for taking the welding control, mounted on the right of the machine
- ready wired
- lockable viewing window
- slide-in control MPS 10
- 5-time synchronised welding control with 8 welding programs for operation with thyristor power stage
- digital current and time setting
- upslope and impulse function
- mains voltage compensation
- automatic mains frequency recognition 50/60 Hz
- parameter entry via keys in operator console
- status display via LED's
- international operating symbols
- stepping and locking contact
- main switch acc. to VDE 0113
- corresponds to the standard VDE 0545-1, EN 60204-1, EN 50 240, EN 292 part 1+2, EN 1050
- CE - displayed

PL 40/63 – 80/100

Resistance welding machines

DALEX Spot welding machines Series PL

Technical Data* acc. to DIN 44753 / ISO 669			PL 40	PL 63	PL 40	PL 63	PL 80	PL 100	
Throat depth		mm	250 – 550⁸⁾		450 – 750⁸⁾		350 – 650⁹⁾		
Electrical Part	Machine-power	Power rating, 50 % d.c.	kVA	40	63	40	63	80	100
		Continuous output	kVA	28,3	44,5	28,3	44,5	56,6	70,7
		Maximum short-circuit power	kVA	148	228	123	192	306	425
		Maximum welding power	kVA	118	182	98	154	245	340
	Machine voltage	Secondary idling voltage	V	5,5	7,02	5,5	7,02	8,33	9,9
		Number of regulating steps		0	0	0	0	0	0
	Mains connection	Rated primary voltage	V	400	400	400	400	400	400
		Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
		Continuous output	kVA	89	137	74	115	184	255
		Main switch / Fusing ¹⁾	A	P3 63/63	KG251/100	P3 63/50	KG 251/80	KG251/125	KG316/160
Wire range, cable smaller = 15 m		mm ²	16	25	10	16	25	25	
Secondary current	Rated operating current	kA	7,22	8,77	7,14	8,7	9,34	9,62	
	Continuous current	kA	5,11	6,2	5,05	6,15	6,61	6,8	
	Short-circuit current	kA	26,2	31,5	21,5	26,3	35	41,5	
	Highest welding current	kA	21	25,2	17,2	21	28	33,2	
	Permitted duty cycle at highest welding current	%	5,9	6	8,6	8,5	5,5	4,2	
Mechanical Part	Cylinder EH	Electrode stroke max.	mm ²	65		65		90	
		Electrode force min. / max.	daN	100/600		100/600		100/600	
		Max. movements at 10 mm stroke	min ⁻¹	300		300		300	
		Air consumption / 1000 strokes ³⁾	m ³	0,75		0,75		0,9	
	Cylinder DH	Electrode stroke max.	mm	65		65		90	
		Work stroke+ approach stroke max.	mm	45 + 20		45 + 20		65 + 25	
		Electrode force min. / max.	daN	100/600		100/600		100/600	
		Max. movements at 10 mm stroke	min ⁻¹	300		300		300	
	Spot mounting	Air consumption / 1000 strokes ³⁾	m ³	0,85		0,85		1,1	
		Throat gap min. / max.	mm	150/310		150/310		160/360	
Electrode arm -∅		mm	50 oben / 60 unten		50 oben / 60 unten		60 oben / 70 unten		
Electrode holder -∅		mm	25		25		30		
Electrode holder, adjustability		mm	130 oben / 120 unten		130 oben / 120 unten		110 oben / 170 unten		
Spot electrode seat No. / outer -∅		mm	2/18		2/18		2/18		
Comp. air	Pipe connection, Nominal width/ connecting thread		NG 13 / G ^{1/2}		NG 13 / G ^{1/2}		NG 13 / G ^{1/2}		
	Operating press. min. / max.	bar	6/10		6/10		6/10		
Cooling water	Pipe connection, Nominal width/ conn. thread		NG 20 / G ^{3/4}		NG 20 / G ^{3/4}		NG 20 / G ^{3/4}		
	Operating pressure min. / max.	bar	2/5		2/5		2/5		
	Consumption at max. loading ¹⁰⁾	l/min ⁻¹	4		4		10		
Machine dimensions	Width x depth x height ⁶⁾	mm	657 x 1000-1300 x 1510 EH / 1620 DH		657 x 1200-1500 x 1510 EH / 1620 DH		701 x 1220-1520 x 1584 EH / 1702 DH		
	Weight of machine switching cabinet compl.	kg	315	325	340	350	480	495	
Shipping data	Gross weight	kg	455	465	480	490	620	635	
	Box: width x depth x height	mm	842 x 1150 x 1601		842 x 1350 x 1601		882 x 1370 x 1725		
	Volume	m ³	1,28		1,82		2,08		
Operational Part	Welding Values	Sheet steel C-content ≤ 0,2 % ⁵⁾	mm	6 + 6	7 + 7	5 + 5	6 + 6	8 + 8	8 + 8
		CrNi sheet ⁵⁾	mm	1,5 + 1,5	1,5 + 1,5	1,5 + 1,5	1,5 + 1,5	1,5 + 1,5	1,5 + 1,5
		Brass sheet ⁵⁾	mm	3 + 3	4 + 4	2 + 2	3 + 3	5 + 5	5 + 5
		Aluminium sheet ⁵⁾	mm	1,5 + 1,5	2 + 2	1 + 1	1,5 + 1,5	3 + 3	3 + 3
		Round steel -∅ ⁵⁾	mm						
		C-content ≤ 0,2 %	mm	18 + 18	20 + 20	16 + 16	18 + 18	22 + 22	22 + 22
	Power Stage	Thyristor – power stage		1/60 L	1/90 L	1/60 L	1/90 L	1/500 IW	1/500 IW

Notes:

- 1) operating class gL
- 3) at operating pressure 6 bar, Hub 20 mm
- 5) dependant on size influences
- 6) excl. switching cabinet width: at PL 40/63 = 502
- 7) excl. thyristor – power stage
- 8) real value = nominal value + 40mm
- 9) real value = nominal value + 50 mm
- 10) by circulatory cooling = pressure difference between cooling water in / - out

Technical alterations reserved.

* details for shortest throat depth