



all dimensions in mm

Part number key

Modular	#####
Standard	#####
Calculated data	#####

Please see our customisation options page for details on the modifications available on our products. Advice and guidance on these options are available from your local sales engineer.

Technical data

1 Part number		774305	774306	774307	774308	774309	774310
2 Nominal power	W	119	119	119	119	119	119
3 Nominal voltage	V	12	24	40	48	110	220
4 No load speed	rpm	4364	4115	3676	3870	3874	4110
5 No load current	A	1.46	1.08	0.56	0.45	0.26	0.12
6 Nominal speed	rpm	3000	3000	3000	3000	3000	3000
7 Nominal continuous torque (S1)	Nm	0.38	0.38	0.38	0.38	0.38	0.38
8 Nominal continuous current (S1)	A	17.5	8.2	4.4	3.7	1.8	0.9
9 Max. intermittent torque (S2 - 15 minutes)	Nm	0.50	0.50	0.50	0.50	0.50	0.50
10 Stall current	A	72.0	40.3	30.0	24.0	9.4	4.2
11 Stall torque	Nm	1.9	2.1	2.9	2.8	2.3	2.1
12 Stack length	mm	45	45	45	45	45	45
13 Maximum efficiency	%	69	68	71	75	63	71
14 Terminal resistance	Ω	0.2	0.6	1.3	2.0	11.8	52.6
15 Terminal inductance	mH	-	-	-	-	-	-
16 Speed constant	rpm/V	351	175	89	77	35	18
17 Torque constant	Nm/A	0.024	0.053	0.099	0.120	0.250	0.510
18 Speed torque gradient	rpm/Nm	2601	1963	1283	1398	1715	1991
19 Rotor inertia	gcm²	1260	1260	1260	1260	1260	1260

Thermal data

20 Ambient temperature	°C	40
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Mechanical data

21 Radial load [distance from flange]	N [mm]	200 [15]
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Other data

22 Number of poles		2
23 Weight	Kg	2.1
24 IP rating		IP54
25 Enclosure		Enclosed
26 Insulation Class		F
27 Reversible		Yes

Compatible products

Gearbox	Page #	Brake	Page #	Controller	Page #
M Box	222	1.5 Nm	258	SC 50/15	262
GB80	224	2.0 Nm	259	EPOS	265
L Box	226	Power-On	261	ESCON	274
LIW	242				
PGx70	250	Encoder	Page #		
GB12	232	Incr. 5-pin	254		
GB9	234	Incr. 10-pin	254		
LIS	244	Diff. 10-pin	255		
LWS	236	Magnetic	256		
GB65	238				

Key
 Standard combination
 Modular combination

PM3 combinations

Quickview - combination drawing and technical data

parvalux
by **maxon**

Combination drawing		Technical data							
PM3-M-Box		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	4	30	72	4	30	72
		Speed	rpm	750.0	100.0	41.7	750.0	100.0	41.7
		Nominal torque	Nm	1.3	8.0	5.0	1.1	7.0	8.0
		Intermittent torque	Nm	1.7	10.5	8.0	1.5	9.2	12.0
PM3-GB80		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	4	30	72	-	-	-
		Speed	rpm	750.0	100.0	41.7	-	-	-
		Nominal torque	Nm	1.3	8.0	5.0	-	-	-
		Intermittent torque	Nm	1.7	10.5	8.0	-	-	-
PM3-L-Box		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	-	-	-	-	-	-
		Speed	rpm	-	-	-	-	-	-
		Nominal torque	Nm	-	-	-	-	-	-
		Intermittent torque	Nm	-	-	-	-	-	-
PM3-LW		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	36	400	1200	36	400	1200
		Speed	rpm	83.3	7.5	2.5	83.3	7.5	2.5
		Nominal torque	Nm	10.1	28.0	28.0	10.1	45.0	45.0
		Intermittent torque	Nm	13.3	28.0	28.0	13.3	45.0	45.0
PM3-P-GX70		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio [stages] ²	:1	-	-	-	3.9 [1]	21 [2]	44 [2]
		Speed	rpm	-	-	-	769.2	142.9	68.2
		Nominal torque	Nm	-	-	-	1.4	7.3	15.4
		Intermittent torque	Nm	-	-	-	1.9	9.7	20.2
PM3-GB12		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	12.5	30	75	12.5	30	75
		Speed	rpm	240.0	100.0	40.0	240.0	100.0	40.0
		Nominal torque	Nm	4.0	8.2	14.3	3.8	7.4	12.8
		Intermittent torque	Nm	5.3	10.8	18.8	5.0	9.8	16.9
PM3-LWS		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	12.5	30	75	12.5	30	75
		Speed	rpm	240.0	100.0	40.0	240.0	100.0	40.0
		Nominal torque	Nm	4.3	8.6	14.3	4.0	8.0	12.8
		Intermittent torque	Nm	5.6	11.3	18.8	5.3	10.5	16.9
PM3-LIS		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	6	50	115	-	-	-
		Speed	rpm	500.0	60.0	26.1	-	-	-
		Nominal torque	Nm	1.8	14.6	33.6	-	-	-
		Intermittent torque	Nm	2.3	19.3	44.3	-	-	-
PM3-LWS		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	48	672	3450	-	-	-
		Speed	rpm	62.5	4.5	0.9	-	-	-
		Nominal torque	Nm	12.4	100.0	100.0	-	-	-
		Intermittent torque	Nm	16.3	100.0	100.0	-	-	-
PM3-GB65		Gear material ¹	Comp.	Comp.	Comp.	Bronze	Bronze	Bronze	
		Gear ratio ²	:1	-	-	-	20	80	160
		Speed	rpm	-	-	-	150.0	37.5	18.8
		Nominal torque	Nm	-	-	-	6.2	21.3	26.1
		Intermittent torque	Nm	-	-	-	8.1	28.0	34.4

Key

Standard combination / standard gear ratio

Modular combination / modular gear ratio

Notes

¹ Comp. = Composite gears

² Full gear ratio options displayed on individual gearbox datasheets

→ Technical data displayed above calculated based on **PM3 220V 3000 rpm** motor. Intermittent torque displayed based on S2 - 15 minute duty cycle.

→ Simplified drawings displayed above show overall envelope size of the combination. Please see individual motor and gearbox datasheets for detailed technical drawings.