



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		775166	775167	775168	775169	775170	775171
2 Nominal power	W	273	273	273	273	273	273
3 Nominal voltage	V	12	24	40	48	110	220
4 No load speed	rpm	3562	3638	3846	3564	4091	3983
5 No load current	A	2.50	1.20	0.59	0.77	0.35	0.13
6 Nominal speed	rpm	3000	3000	3000	3000	3000	3000
7 Nominal continuous torque (S1)	Nm	0.87	0.87	0.87	0.87	0.87	0.87
8 Nominal continuous current (S1)	A	28.5	14.8	9.4	8.0	3.6	1.8
9 Max. intermittent torque (S2 - 15 minutes)	Nm	1.15	1.15	1.15	1.15	1.15	1.15
10 Stall current	A	112.0	76.0	54.0	55.0	17.4	8.7
11 Stall torque	Nm	3.7	4.8	5.3	6.4	4.5	4.7
12 Stack length	mm	81	81	81	81	81	81
13 Maximum efficiency	%	77	79	80	74	77	78
14 Terminal resistance	Ω	0.11	0.32	0.74	0.87	6.34	25.30
15 Terminal inductance	mH	-	-	-	-	-	-
16 Speed constant	rpm/V	285	146	92	73	37	17
17 Torque constant	Nm/A	0.034	0.064	0.098	0.120	0.260	0.530
18 Speed torque gradient	rpm/Nm	974	760	732	552	906	874
19 Rotor inertia	gcm²	4600	4600	4600	4600	4600	4600

Thermal data

20 Ambient temperature	°C	40
------------------------	-----------	----

Mechanical data

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

Other data

22 Number of poles		2
23 Weight	Kg	2.9
24 IP rating		IP21
25 Enclosure		Ventilated
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				
GB12	232	Encoder	Page #		
GB9	234	Incr. 5-pin	254		
LIS	244	Incr. 10-pin	254		
LWS	236	Diff. 10-pin	255		
GB65	238	Magnetic	256		

Key
Standard combination
Modular combination

PM60 combinations

Quickview - combination drawing and technical data

parvalux
by **maxon**

Combination drawing	Technical data							
	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	3.0	8.0	5.0	2.6	12.0	8.0
	Intermittent torque	Nm	3.9	13.0	8.0	3.4	19.0	12.0
	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	3.0	8.0	5.0	-	-	-
	Intermittent torque	Nm	3.9	13.0	8.0	-	-	-
	Gear material ¹							
	Gear ratio ²	:1						
	Speed	rpm						
	Nominal torque	Nm						
	Intermittent torque	Nm						
	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	23.2	28.0	28.0	23.2	45.0	45.0
	Intermittent torque	Nm	28.0	28.0	28.0	30.6	45.0	45.0
	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	-	-	-	3.2	16.8	30.0
	Intermittent torque	Nm	-	-	-	4.3	22.2	37.5
	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	9.2	18.8	18.0	8.7	17.0	27.0
	Intermittent torque	Nm	12.2	24.8	29.0	11.5	22.4	38.8
	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	9.8	19.6	32.6	9.2	18.3	29.4
	Intermittent torque	Nm	12.9	25.9	43.1	12.2	24.2	38.8
	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	4.0	33.5	74.0	-	-	-
	Intermittent torque	Nm	5.3	44.3	100.0	-	-	-
	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	28.4	100.0	100.0	-	-	-
	Intermittent torque	Nm	37.5	100.0	100.0	-	-	-
	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	-	-	-	14.1	48.7	59.9
	Intermittent torque	Nm	-	-	-	18.6	64.4	79.1

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 **PM60 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.