



# AC For handling heavy load Roller PM605 series

# Roller diameter⊘60

# Roller diameter Ø60.5

· Roller diameter / Ø60.5 · Thickness / t3.2 Shaft diameter / Ø12

· Voltage / 3ph 200V, 1ph 100V (Single-phase specification is PM605AS series only)

· Tube material / STKM12

· Surface treatment / Trivalent chromate processing

### **Operation**

### · Standard type AS series

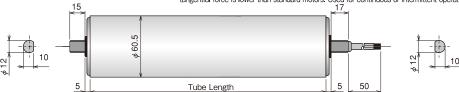
Continuous duty 24 hours Intermittent Operation Minimum contact time 3 seconds ON, 2 seconds OFF

#### · High power type BP series

High power type delivers approx 2.5 times output of a standard type motor. It cannot be used for continuous operation or intermittent operation. Minimum tact time of intermittent operation is 3 sec ON and 5-sec OFF.

#### Accumulation type AU series

This high-impedance low-current rating motor does not burn out even when locked continuously. Starting toque and tangential force is lower than standard motors. Used for continuous or intermittent operation with no restriction of tact time.



# Tube Length: PM605AS / PM605BP / PM605AU

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Tube Length (mm)	200	250	300	400	500	600	700	800	900	1000	
Weight(kg)	2.2	2.7	2.9	3.3	3.8	4.2	4.7	5.1	5.6	6.0	
Spring loaded shaft	×	0	0	0	0	0	0	0	0	0	

- Conveyor frame inside dimension and frame hole shape vary by the manufacturer.
- A gap of 2~5mm is required between the frame inside dimension and Power Moller.

# Options: PM605AS / PM605AU



Rubber Laggings - NR, UR, NB, CR

Natural rubber, Urethane, NBR, Neoprene



BR Built-In Brake - BR □-Min-|- 250mm





WA Water Proof \*1 WT \*2 -Min- → 260mm





DR Drip Proof \*\*3





-Min- □ 200mm





EC Free Cluch - EC



**□** ≥ 330mm

- \*1 Available nominal speed is 4~30(AU series : 4~10). But available nominal speed is different for single-phase
- 100V specification. Torque value may be reduced by nominal speed. Inquire with us for more detail.

  \*2 Nominal speed 15m or below can only be produced. In such a case, add WA-WT.

  \*3 Available nominal speed is 4~45(AU series : 4~15). But available nominal speed is different for single-phase
- 100V specification. Torque value may be reduced by nominal speed. Inquire with us for more detail.

  PM605AU brake specification cannot be produced

  PM605AU water-proof specification cannot be produced with spring loaded shaft WT.

## Options: PM605BP



Rubber Laggings - NR, UR, NB, CR

Natural rubber, Urethane, NBR, Neoprene



BR Built-In Brake - BR -Min-- 250mm

**=** ≥ 300mm

WA Water Proof

-Min-| 240mm

 $\geq 260$ mm

DR Drip Proof 

 ${}^{\sim}$   $\geq$  260mm

Optional. Add WA-WT when ordering. Nominal speed may be reduced. Please inquire for detail.



Accumulation (AU) type cannot used with an inverter. Reduced transfer torque or unstable operation is possible.

# **Product Designation:**



Motor type Nominal Speed: 4,5,8,9,10,13,15,20,30,45,50,60

PM605BP is not available for 45. PM605AU is not available for 45, 50, 60.

Tube Length: Specify in mm.

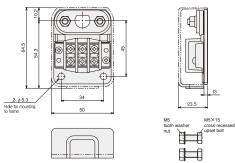
Voltage : 3ph-200V / 1ph-100V etc.

: AS, BP, AU

Please inquire for other voltage.

Options : Each of the following optional specification may be selected.

# Terminal Bracket: No.A-200



- \*Drawing data can be downloaded from our web page.
   In the case of water-proof or drip-proof specification, No.C-001-D is the standard
- Apply 3Nm torque for securing the Power Moller mounting shaft, and 3.1Nm\* for securing the bracket.

  \*If case of using a Phillips screwdriver, the required torque is 3.5Nm.

# Operating characteristics: PM605AS

### 3ph 200V/50Hz

Nominal Speed	Rated Speed	Tangentia	Force(N)	Torqu	e(N·m)	In	put Curren	t(A)	Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.0	32.7	150.7	0.99	4.56					
5	5.5	24.1	110.4	0.73	3.34					
8	8.0	16.5	75.7	0.50	2.29					15.0
9	10.1	13.2	60.2	0.40	1.82		0.07			
10	11.0	11.9	55.2	0.36	1.67					
13	13.9	9.6	43.6	0.29	1.32	0.07		0.40		
15	16.9	8.9	41.7	0.27	1.26	0.07		0.13	3.2	
20	24.1	6.3	29.1	0.19	0.88					
30	35.1	4.3	19.8	0.13	0.60					
45	46.0	3.3	15.2	0.10	0.46					
50	50.6	3.0	13.9	0.09	0.42					
60	66.5	2.3	10.6	0.07	0.32					

### 3ph 200V/60Hz

Nominal Speed	Rated Speed	Tangentia	I Force(N)	Torqu	e(N·m)	<b>I</b> n	put Curren	t(A)	Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.8	26.1	116.7	0.79	3.53					
5	6.6	19.2	85.3	0.58	2.58					
8	9.6	13.2	58.5	0.40	1.77					
9	12.1	10.6	46.6	0.32	1.41					12.8
10	13.2	9.6	42.6	0.29	1.29					
13	16.7	7.6	33.7	0.23	1.02	0.00	0.00	0.10	3.3	
15	20.3	7.3	32.1	0.22	0.97	0.06	0.06	0.13	3.3	
20	29.0	5.0	22.5	0.15	0.68					
30	42.2	3.6	15.5	0.11	0.47					
45	55.3	2.6	11.9	0.08	0.36					
50	60.8	2.3	10.6	0.07	0.32					
60	80.0	2.0	8.3	0.06	0.25					

# 1ph 200V/60Hz

Nominal	Rated	Tangentia	Force(N)	Torqu	e(N·m)	<b>I</b> n	put Curren	t(A)	Input	Output
Speed (m/min)	Speed (m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.0	18.2	47.9	0.55	1.45					
5	5.5	13.2	35.0	0.40	1.06					
8	8.0	8.9	24.1	0.27	0.73					17.5
9	10.1	7.3	19.2	0.22	0.58					
10	11.0	6.6	17.5	0.20	0.53					
13	13.9	6.0	15.9	0.18	0.48	0.21	0.21	0.00	0.0	
15	16.9	5.3	13.9	0.16	0.42	0.21	0.21	0.28	2.3	
20	24.1	3.6	9.9	0.11	0.30					
30	35.1	2.6	6.9	0.08	0.21					
45	46.0	2.0	5.3	0.06	0.16					
50	50.6	1.7	4.6	0.05	0.14					
60	66.5	1.3	3.6	0.04	0.11					

\*Capacitor external connection 5.5µF/220V

### 1ph 200V/60Hz

Nominal Speed	Rated Speed	Tangentia	Force(N)	Torqu	e(N·m)	In	put Curren	t(A)	Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.8	16.9	47.9	0.51	1.45					
5	6.6	12.6	35.0	0.38	1.06					
8	9.6	8.6	24.1	0.26	0.73					17.5
9	12.1	6.6	19.2	0.20	0.58					
10	13.2	6.3	17.5	0.19	0.53					
13	16.7	5.6	15.9	0.17	0.48	0.17	0.19	0.28	0.7	
15	20.3	5.0	13.9	0.15	0.42	0.17	0.19	0.28	2.7	
20	29.0	3.6	9.9	0.11	0.30					
30	42.2	2.3	6.9	0.07	0.21					
45	55.3	2.0	5.3	0.06	0.16					
50	60.8	1.7	4.6	0.05	0.14					
60	80.0	1.3	3.6	0.04	0.11					

\*Capacitor external connection 5.5µF/220V

■ Please inquire for other voltage.
 ■ Rated speed shown is when loaded. The value at no load, light load and overload varies. Select a right one by referring to "Caution for Design".

# Operating characteristics : PM605AU

### 3ph 200V/50Hz

Nominal Speed	Rated Speed	Tangentia	Force(N)	Torqu	e(N·m)	In	put Curren	t(A)	Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	3.3	10.6	54.2	0.32	1.64					
5	4.6	7.6	39.7	0.23	1.20					
8	6.6	5.3	27.1	0.16	0.82					
9	8.5	4.3	21.5	0.13	0.65					10.0
10	9.1	4.0	19.8	0.12	0.60	0.06	0.06	0.07	1.2	
13	11.8	3.6	18.2	0.11	0.55					
15	13.9	3.0	15.9	0.09	0.48					
20	19.4	2.3	11.2	0.07	0.34					
30	29.7	1.7	7.9	0.05	0.24					

### 3ph 200V/60Hz

Nominal	Rated Speed	Tangentia	Force(N)	Torqu	Torque(N·m)		put Curren	t(A)	Input	Output
Speed (m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.0	7.3	41.7	0.22	1.26					
5	5.5	5.3	30.4	0.16	0.92					
8	8.0	3.6	20.8	0.11	0.63					
9	10.3	3.0	16.5	0.09	0.50					
10	11.0	2.6	15.2	0.08	0.46	0.05	0.05	0.06	1.9	8.5
13	14.2	2.3	13.9	0.07	0.42					
15	16.8	2.3	12.2	0.07	0.37					
20	23.4	1.7	8.6	0.05	0.26					
30	35.8	1.0	6.0	0.03	0.18					

# Operating characteristics: PM605BP

# 3ph 200V/50Hz

Nominal	Rated	Tangentia	Force(N)	Torqu	e(N·m)	<b>I</b> n	put Curren	t(A)	Input	Output
Speed (m/min)	Speed (m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	3.7	181.8	449.5	5.50	13.60					
5	5.3	128.6	317.9	3.89	9.62					
8	7.4	90.9	224.7	2.75	6.80					
9	9.2	73.4	181.4	2.22	5.49					
10	10.5	64.1	158.9	1.94	4.81					
13	13.0	51.9	128.2	1.57	3.88	0.11	0.12	0.32	15.2	30.5
15	20.0	33.7	83.4	1.02	2.52					
20	27.0	26.8	65.9	0.81	1.99					
30	38.2	18.8	46.6	0.57	1.41					
50	47.4	15.2	37.6	0.46	1.14					
60	58.8	12.2	30.3	0.37	0.92					

#### 3ph 200V/60Hz

Nominal Speed	Rated Speed	Tangentia	Force(N)	Torqu	e(N·m)	In	put Curren	t(A)	Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
4	4.5	145.5	360.2	4.40	10.90					
5	6.3	102.8	254.7	3.11	7.70					
8	8.9	72.7	180.1	2.20	5.45				14.5	28.5
9	11.1	58.5	145.4	1.77	4.40					
10	12.7	51.2	127.3	1.55	3.85					
13	15.7	41.3	102.7	1.25	3.11	0.09	0.10	0.31		
15	24.1	27.1	66.8	0.82	2.02					
20	32.5	21.2	52.8	0.64	1.60					
30	46.0	15.2	37.3	0.46	1.13					
50	57.0	12.2	30.1	0.37	0.91					
60	70.7	9.9	24.3	0.30	0.73					

<sup>\*</sup>The values in the characteristics list are only for your reference and not the warranted values. The values represent the characteristics of a single standard motor roller(no linked operation) without including other specifications, and the values may change when including other specifications or with linked operation.