



# AC For handling light load Roller PM427 series

## Roller diameter⊘42

## Roller diameter Ø42.7

· Roller diameter / Ø42.7 · Thickness /t1.5 Shaft diameter / Ø12

· Voltage / 3ph 200V, 1ph 100V (Single-phase specification is PM427AS series only)

### · Tube material / STKM12 · Surface treatment / Trivalent chromate

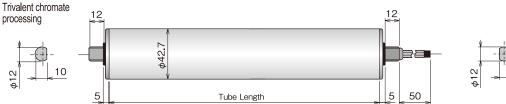
## **Operation**

## Standard type AS series

Continuous duty 24 hours Intermittent Operation Minimum contact time 3 seconds ON, 2 seconds 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: PM427AS / PM427AU

—Min—— 20	)Omm		चि ≥ 220mm						
Tube Length (mm)	200	250	300	400	500	600	700	800	
Weight(kg)	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.0	
Spring loaded shaft	×	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.
- \*PM427AU can be produced from the minimum dimension of 200mm, and spring loaded shaft from 230mm and higher.

## **Product Designation:**

PM427AS - 10 - 300 - 3 - 200 -BR Power Moller Nominal Tube model Speed Length Voltage

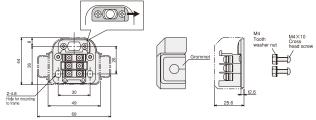
Motor type : AS / AU

Nominal Speed: 5,8,10,15,20,30 (30 is only for PM427AS)

Tube Length: Specify in mm. Voltage : 3ph-200V / 1ph-100V etc. Please inquire for other voltage.

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

### Terminal Bracket: No.E-920



- \*Drawing data can be downloaded from our web page.
   In the case of water-proof or drip-proof specification, No.E-021-D is the standard accessory.
- Grommet is removable
   Apply 0.7Nm torque for securing the Power Moller mounting shaft, and 1.7Nm for securing the bracket.
- The frame thickness is not allowed to exceed 3.8mm. Slide the fixing plate to the slot of the shaft to fix it.

Options: PM427AS / PM427AU

BR Built-In Brake - BR

WA Water Proof\* -Min−) 250mm

DR Drip Proof\*

Rubber Laggings - NR, UR, NB, CR Natural rubber, Urethane, NBR, Neoprene

# Operating characteristics: PM427AS

### 3ph 200V/50Hz

Nominal Rated		Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
Speed (m/min)	Speed (m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
5	4.7	19.7	64.6	0.42	1.38					
8	7.1	13.1	42.6	0.28	0.91					12.5
10	10.7	8.4	28.1	0.18	0.60	0.06	0.06	0.08	2.3	
15	15.0	7.0	23.4	0.15	0.50	0.06	0.06	0.08	2.3	
20	23.0	4.7	15.5	0.10	0.33					
30	35.6	2.8	9.8	0.06	0.21					

### 3ph 200V/60Hz

	Nominal Rated Speed Speed (m/min) (m/min)		Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
			Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
	5	5.6	13.6	52.9	0.29	1.13				1.9	10.5
	8	8.5	8.9	35.1	0.19	0.75					
	10	12.9	6.1	23.0	0.13	0.49	0.05	0.05	0.07		
	15	18.0	5.2	19.2	0.11	0.41	0.05	0.05	0.07		
	20	27.5	3.3	12.6	0.07	0.27					
	30	42.8	1.9	8.0	0.04	0.17					

### 1ph 100V/50Hz

Nominal	Rated	Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
Speed (m/min)	Speed (m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
5	4.7	10.8	23.4	0.23	0.50				1.6	10.0
8	7.1	7.0	15.5	0.15	0.33		0.12			
10	10.7	4.7	10.3	0.10	0.22	0.11		0.13		
15	15.0	4.2	9.4	0.09	0.20	0.11		0.13		
20	23.0	2.8	6.1	0.06	0.13					
30	35.6	1.9	3.7	0.04	0.08					

### \*Capacitor external connection 3µF/220V

#### 1ph 100V/60Hz

TPH 100 V 7 00 HZ										
Nominal Speed (m/min)	Rated Speed	Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(VV)
5	5.6	9.4	26.7	0.20	0.57		0.11		1.7	10.0
8	8.5	6.1	17.8	0.13	0.38					
10	12.9	4.2	11.7	0.09	0.25	0.11		0.13		
15	18.0	3.7	10.3	0.08	0.22	0.11		0.13		
20	27.5	2.3	7.0	0.05	0.15					
30	42.8	1.4	4.2	0.03	0.09					

#### -Min- □ 200mm **=** ≥ 220mm

 $^{**}$  Available nominal speed is 5 $\sim$ 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. ■PM427AU built-in brake, water-proof or drip-proof specification cannot be produced.

**□** ≥ 270mm

~ ≥ 250mm



PM380AS/PM427AS and Accumulation (AU) type cannot used with an inverter. Reduced transfer torque or unstable operation is possible.

\*Capacitor external connection 3µF/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: PM427AU

## 3ph 200V/50Hz

Nominal Speed (m/min)	Rated Speed (m/min)	Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
		Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
5	4.7	15.5	45.0	0.33	0.96				1.7	7.7
8	7.1	10.3	30.0	0.22	0.64		0.04			
10	10.7	6.6	19.7	0.14	0.42	0.04		0.05		
15	15.0	5.6	16.4	0.12	0.35					
20	23.0	3.7	10.8	0.08	0.23					

## 3ph 200V/60Hz

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Nominal Speed	Rated Speed	Tangential Force(N)		Torque(N·m)		Input Current(A)			Input	Output
(m/min)	(m/min)	Rated	Starting	Rated	Starting	No-load	Rated	Starting	(W)	(W)
5	5.6	9.8	35.1	0.21	0.75				1.4	6.4
8	8.5	6.6	23.4	0.14	0.50					
10	12.9	4.2	15.5	0.09	0.33	0.03	0.03	0.05		
15	18.0	3.7	12.6	0.08	0.27					
20	27.5	2.3	8.4	0.05	0.18					

<sup>■</sup> 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".