

AMROLL DRUM MOTOR – TM113A

TM113A drum motor gears are manufactured using high alloy steel, machined and honed to AGMA/DIN 6 standards, reducing noise to minimal decibel levels. Low noise levels contribute to good working conditions. With technical innovations, this drum motor has been developed especially for applications including the followings:

X-ray machines (airport and railway station)

Baggage check-in counters at airports

Package machines

Dynamic weighing equipment

Pharmaceutical handling

Food processing

Meat, poultry and fish industry

Postal sorter

Belt conveyors

All TM113A drum motor have the following characters:

Drum motor shell

Mild steel crowned shell treated with anti-rust oil

Food grade drum motor shell can be supplied in stainless steel-304

Gear transmission

Gears machines and honed to AGMA/DIN 6 standards to ensure low noise

Die cast aluminium gearbox

Motor

Common global voltages at 50 Hz or 60 Hz

Motor windings insulation class F

All motors with thermal protection

Oil cooled electrical motor

Cable length standard 1.2 meters outside shaft

Sealing system

Double shaft sealing system

Sealing system-degree of protection IP 66/67

Oil

Pre-lubricated with oil

Oil change recommended every 50,000 hours of operation

Other items

Backstop(anti-run back)or electromagnetic brakes can be fitted on requests

An electromagnetic brake is fitted on requests, but the min.face width will be increased

To be used in the horizontal position only

Belt speed and face width(L)on requests

Non-standard drum motors are available on requests

Conformity with CE and UL safety certificate

AMROLL drum motor TM113A -1*230v/50Hz

Power (kw/hp)	No.of poles	Gear stages	Gear ratio	Nominal belt speed (m/s)	Full load torque (Nm)	Full load belt pull (N)	Full load current (A)	Min. face width (L) (mm)	Min.L Weight (kg)
0.12/ 0.16	4	3	60.66	0.15	49.04	868	0.84	290	11
			49.36	0.18	39.83	705			
			41.07	0.21	35.41	627			
			37.70	0.23	31.87	564			
			31.59	0.27	25.49	451			
			25.70	0.34	21.24	376			
	21.38	0.40	17.68	313					
	19.63	0.44	15.93	282					
	15.71	0.55	12.88	230					
	13.07	0.65	10.85	192					
	12.00	0.71	10.34	183					
	6	3	60.66	0.08	79.67	1410			
49.36	0.10	63.73	1128						
0.15/ 0.20	4	3	60.66	0.14	61.30	1085	1.24	300	11
			49.36	0.17	49.78	881			
			41.07	0.21	44.24	783			
			37.70	0.22	39.83	705			
			31.59	0.26	31.87	564			
			25.70	0.33	26.56	470			
	21.38	0.39	22.15	392					
	19.63	0.43	19.94	353					
	15.71	0.54	16.27	288					
	13.07	0.64	13.56	240					
	12.00	0.70	12.94	229					
	0.18/ 0.24	4	3	60.66	0.14	73.56			
49.36				0.17	59.78	1058			
41.07				0.21	53.11	940			
37.70				0.22	47.80	846			
31.59				0.26	38.25	677			
25.70				0.33	31.87	564			
21.38		0.39	26.56	470					
19.63		0.43	23.90	423					
15.71		0.54	19.49	345					
13.07		0.64	16.27	288					
12.00		0.70	15.48	274					
0.23/ 0.31		4	3	49.36	0.17	76.33	1351	1.67	325
	41.07			0.20	67.86	1201			
	37.70			0.22	61.08	1081			
	31.59			0.26	48.87	865			
	25.70			0.32	40.74	721			
	21.38			0.38	33.96	601			
	19.63	0.42	30.57	541					
	15.71	0.53	24.97	442					
	13.07	0.63	20.79	368					
	12.00	0.68	19.78	350					

At the min. face width (L), the total weight of a drum motor grows approx.2kgs per 100 mm.

AMROLL drum motor TM113A -3*400v/50Hz

Power (kw/hp)	No. of poles	Gear stages	Gear ratio	Nominal belt speed (m/s)	Full load torque (Nm)	Full load belt pull (N)	Full load current (A)	Min. face width (L) (mm)	Min.L Weight (kg)
0.12/ 0.16	4	3	60.66	0.14	49.04	868	0.42	270	8
			49.36	0.17	39.83	705			
			41.07	0.20	35.41	627			
			37.70	0.22	31.87	564			
			31.59	0.27	25.49	451			
			25.70	0.33	21.24	376			
	21.38	0.39	17.68	313					
	19.63	0.43	15.93	282					
	15.71	0.54	12.88	230					
	13.07	0.64	10.85	192					
	12.00	0.70	10.34	183					
	6	3	60.66	0.09	79.67	1410			
49.36	0.11	63.73	1128						
0.15/ 0.20	4	3	60.66	0.14	61.30	1085	0.47	290	11
			49.36	0.17	49.78	881			
			41.07	0.20	44.24	783			
			37.70	0.22	39.83	705			
			31.59	0.26	31.87	564			
			25.70	0.32	26.56	470			
	21.38	0.39	22.15	392					
	19.63	0.42	19.94	353					
	15.71	0.53	16.27	288					
	13.07	0.64	13.56	240					
	12.00	0.69	12.94	229					
	6	3	49.36	0.11	79.67	1410			
0.18/ 0.24	4	3	60.66	0.11	73.56	1302	0.57	290	11
			49.36	0.17	59.78	1058			
			41.07	0.20	53.11	940			
			37.70	0.22	47.80	846			
			31.59	0.26	38.25	677			
			25.70	0.32	31.87	564			
	21.38	0.39	26.56	470					
	19.63	0.42	23.90	423					
	15.71	0.53	19.49	345					
	13.07	0.64	16.27	288					
	12.00	0.69	15.48	274					
	0.25/ 0.34	4	3	49.36	0.16	82.99			
41.07				0.20	73.73	1305			
37.70				0.22	66.39	1175			
31.59				0.26	53.11	940			
25.70				0.32	44.29	784			
21.38				0.38	36.89	653			
19.63		0.42	33.22	588					
15.71		0.52	27.12	480					
13.07		0.62	22.60	400					
12.00		0.68	21.47	380					

At the min. face width (L), the total weight of a drum motor grows approx.2kgs per 100 mm.

AMROLL drum motor TM113A -3*400v/50Hz

Power (kw/hp)	No.of poles	Gear stages	Gear ratio	Nominal belt speed (m/s)	Full load torque (Nm)	Full load belt pull (N)	Full load current (A)	Min. face width (L) (mm)	Min.L Weight (kg)
0.37/ 0.50	4	3	31.59	0.26	78.60	1391	1.13	325	14
			25.70	0.32	65.50	1159			
			21.38	0.38	54.59	966			
			19.63	0.42	49.13	870			
		2	15.71	0.52	40.14	710			
			13.07	0.62	33.45	592			
0.55/ 0.75	2	3	41.07	0.40	81.14	1436	1.24	325	14
			38.50	0.44	73.03	1293			
			31.59	0.53	59.66	1056			
			25.70	0.65	49.72	880			
			21.38	0.79	40.57	718			
			19.63	0.85	36.51	646			
		2	15.71	1.10	29.83	528			
			13.07	1.30	24.86	440			
			12.00	1.40	23.68	419			

At the min. face width (L), the total weight of a drum motor grows approx.2kgs per 100 mm.

TM113A optional list-drum motor/idler pulley

Specifications	Drum motor	Idler pulley
Shell		
Mild steel crowned	1	1
Mild steel cylindrical	2	2
Stainless steel(std. 304) crowned	2	2
Stainless steel(std. 304) cylindrical	2	2
End housing (front & rear)		
Die cast aluminium	1	1
Stainless steel(std. 304)	2	2
Shaft (front & rear)		
Mild steel	1	1
Plated nickel	2	2
Stainless steel(std. 304)	2	2
Rubber lagging		
Hot vulcanized black smooth rubber lagging	2	2
White and blue rubber lagging in food quality	2	2
Urethane lagging	2	2
Sprockets for modular belting	2	2
V-grooves in the rubber lagging	3	3
Electrical motors		
1 or 3-phase asynchronous motor	1	
Voltage 1-230V/50Hz or 3-400v/50Hz	1	
Dual voltage 3-230/400v at 50Hz-star/delta connection	2	
Most common global voltages at 50 or 60 Hz	1	
Thermal protection	1	
Low temperature oil	2	
Food grade oil & grease (FDA and USDA)	2	
Electrical connection		
Straight cable connector	1	
Elbow cable connector	2	
Elbow stainless steel cable connector	3	
Aluminium terminal box with WAGO clamp	2	
Stainless steel terminal box with WAGO clamp	3	
Oil resistant PVC cable	1	
LS halogen-free cable	2	
Screened cable (for VFD and brakes)	3	
Other options		
Mechanical backstop	2	
Electromagnetic brake	2	
Modified for vertical or angled mounting	3	
Operation with VFD	2	

Note:

1-fitted as standard

2-optional extras as non-standard

3-available as limited option but need to confirm with manufacturer

