

08 CLARIFIER SCRAPER MOTOR DATA SHEET

1. Name of motor	-	Clarifier scraper motor			
2. Manufacturer	-	ABB			
3. Country of origin	-	CHINA			
4. Type/machine code	-	M2BAX80MB4			
5. Applied standard (characteristics)	-	IEC			
6. Ratings					
(1) Rated output	kW	0.75			
(2) Service factor	-	1			
(3) Number of pole	-	4			
(4) Rated speed	min ⁻¹	1438			
(5) Rated voltage	V	380			
(6) Number of phases		3			
(7) Rated frequency	Hz	50			
(8) Insulation class	-	F			
(9) Temperature rise	-	B			
(10) Rated duty		S1			
7. Service Conditions					
(1) Starting method	-	Directly			
(2) Direction of rotation (viewed from DE)	-	CW			
(3) Reverse rotation (Yes / No)	-	No			
(4) Location (Indoor / Outdoor)		Outdoor			
(5) Enclosure IP rating	-	IP55			
(a) Motor frame	-	IP55			
(b) Terminal boxes	-	IP55			
(6) Installation (Horizontal / Vertical)		Vertical			
(7) Design ambient temperature	°C	-20~+ 40			
(8) Explosion proof (Required / Not required)		Not required			
(9) Noise level (at full-load condition)	dB (A)	48 dB(A)			
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8. Characteristics		
(1) Current		
(a) Normal current	A	1.83
(b) No-load current	A	1.2
(c) Starting current	A	7.9
(2) Torque		
(a) Starting torque	%	3.4
(b) Maximum torque	%	4.2
(3) Slip at rated output		NA
(4) Efficiencies		
(a) At 100% load	%	82.5
(b) At 75% load	%	81.8
(c) At 50% load	%	79.2
(d) At 25% load	%	NA
(5) Power factor		
(a) At rated load	%	0.74
(b) At starting load	%	0.59
(6) GD2 coupled with driven equipment	kg-m ²	0.00295
(7) Starting time with driven equipment	s	NA
(8) Allowable number of starts		
(a) From cold condition per hour	-	NA
(b) From hot condition per hour	-	NA
(c) Minimum time between 2 starts (running state)	min	NA
(d) Minimum time between 2 starts (stop state)	min	NA
(9) Allowable locked-rotor time		
(a) At cold condition	s	NA
(b) At hot condition	s	NA

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9. Constructions		
(1) Stator winding connection (Wye / Delta)	-	Wye
(2) Type of bearing (DE / NDE)	-	6204-2Z/C3 - 6203-2Z/C3
(3) Lubricants		
(a) Recommended lubricant and brand name	-	NA
(b) Pouring method	-	NA
(c) Quantity of lubricant for initial filling	-	NA
(d) Recommended interval for recharging	h	NA
(e) Recharging quantity	-	NA
(f) Location of pouring	-	NA
(indicated in the outline drawing)		NA
(4) Bearing cooling water requirement (if required)		
(a) Quantity	m ³ /h	NA
(b) Inlet water temperature	°C	NA
(c) Required cooling water pressure	kPa	NA
(d) Type of cooling water	-	NA
(5) Water to air heat exchanger (if applied)		
(a) Quantity of cooling water	m ³ /h	NA
(b) Inlet water temperature	°C	NA
(c) Required cooling water pressure	kPa	NA
(d) Type of cooling water	-	NA
(6) Space heater (AC 220V 1 phase)	W	NA
(7) Weight	kg	21
10. Attached document numbers		
(1) Motor outline drawing	-	NA
(2) Terminal box drawings	-	NA
(a) For main power	-	NA
(b) For instruments	-	NA
(c) For space heater	-	NA

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(3) Current transformers (for MV motors only)		NA
(a) Characteristics curves	-	NA
(b) Outline drawing	-	NA
(4) Efficiency curves	-	NA
(5) Thermal capability curves		NA
(a) At cold condition	-	NA
(b) At hot condition	-	NA
(6) Starting and speed torque characteristics at 80%, 90% and 100% voltage	-	NA

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