14 FLOCCULANT FEED PUMP MOTOR DATA SHEET

1. Name of motor	-	Flocculant feed pump motor
2. Manufacturer	-	ABB
3. Country of origin	-	CHINA
4. Type/machine code	-	QABP71M4A
5. Applied standard (characteristics)	-	IEC
6. Ratings		
(1) Rated output	kW	0.25
(2) Service factor	-	1.0
(3) Number of pole	-	4
(4) Rated speed	$R.min^{-1}$	1420
(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 or CCW
(3) Reverse rotation (Yes / No)	-	No
(4) Location (Indoor / Outdoor)		Outdoor
(5) Enclosure IP rating	-	
(a) Motor frame	-	IP55
(b) Terminal boxes	-	IP55
(6) Installation (Horizontal / Vertical)		Vertical
(7) Design ambient temperature	°C	-15 ~ 40
(8) Explosion proof (Required / Not required)		Not required
(9) Noise level (at full-load condition)	dB (A)	62
8. Characteristics		
(1) Current		

(a) Normal current	A	0.86
(b) No-load current	A	0.65
(c) Starting current	A	0.86
(2) Torque		
(a) Starting torque	%	2.0
(b) Maximum torque	%	2.8
(3) Slip at rated output		0.0417
(4) Efficiencies		
(a) At 100% load	%	87.1
(b) At 75% load	%	88.3
(c) At 50% load50%	%	88.2
(d) At 25% load	%	84.7
(5) Power factor		
(a) At rated load	%	64
(b) At starting load	%	
(6) GD2 coupled with driven equipment	kg-m²	0.00053
(7) Starting time with driven equipment	s	1-2
(8) Allowable number of starts	-	
(a) From cold condition per hour	-	5
(b) From hot condition per hour	-	3
(c) Minimum time between 2 starts (running state)	min	10
(d) Minimum time between 2 starts (stop state)	min	10
(9) Allowable locked-rotor time		NA
(a) At cold condition	s	3
(b) At hot condition	s	3
9. Constructions		
(1) Stator winding connection (Wye / Delta)	-	Wye
(2) Type of bearing (DE / NDE)	-	6202VV/C3
(3) Lubricants		/
(a) Recommended lubricant and brand name	-	/

(b) Pouring method	-	/
(c) Quantity of lubricant for initial filling	-	/
(d) Recommended interval for recharging	-	/
(e) Recharging quantity	-	/
(f) Location of pouring	-	/
(indicated in the outline drawing)		/
(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	39
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
(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