

# Data sheet for three-phase Squirrel-Cage-Motors ABB

**Motor type:** FS: 4p - 7.5 hp

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	Project

Remarks

## Electrical data

Class I, Div 1 Gr. D T2A

U [V]	$\Delta/Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4				
460	Y	60	7.50		1,765	9.70	7.90	6.40	5.00	63.0	91.7	91.7	90.7	78.9	72.3	60.5	22.0	273	455	
230	YY	60	7.50		1,765	19.40	15.89	12.80	10.00	126.0	91.7	91.7	90.7	78.9	72.3	60.5	22.0	273	455	
400	Y	50	5.00		1,473	7.43	6.20	5.16	4.12	67.0	88.4	88.2	86.8	78.6	70.8	5.8	17.8	287	341	
200	YY	50	5.00		1,473	14.86	12.40	10.32	8.24	134.0	88.4	88.2	86.8	78.6	70.8	5.8	17.8	287	341	

Frame Type:	Type of constr.: (E) Foot mounted - C-Face	Motor Prot.:(A) No winding protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT:192 lbs	Insulation Class.:Insulation class F	Temp. Rise Cl.: B	Amb. Temp.: +55 to -20 °C @1000 m	kVA: H IP IP65

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	57.0 dB(A) / 69.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz			Safe Stall Time Hot	25 s					
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	42 s
SPL@3	37.0	44.0	54.0	53.0	44.0	35.0	dB(A)	Frame material	cast iron
Moment of inertia	0.8 Lb-ft <sup>2</sup>		Color, paint shade						
Ext Load Inertia Capability:	39.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE			Method of cooling	TEFC					
Bearing_Type	Ball Bearing	Ball Bearing	Direction of rotation	Bidirectional					
AFBMA:	45BC02JP30	40BC02JP30	Fan Material	Polypropylen ESD					
<b>Grease</b>			VFD	CT: 4:1 VT: 20:1					
Capacity			Space heaters	without					
Grease Type:	Exxon Mobile EM		Brake:	-/-					


## Terminal box

Lead Wire Connection	9 LEAD - WYE				Terminal box position	(3) Mounting - F-1
Voltage	L1	L2	L3	Connected together	Material of terminal box	Cast Iron
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	Cable entry	-/-
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9		

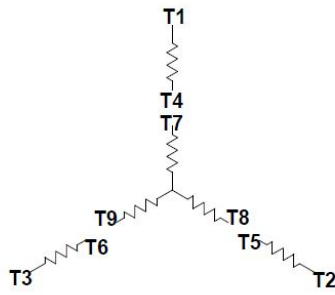
### Notes:

I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque

3) Value is valid only for DOL operation with motor design IC411  
2) at rated power I at full load

Responsible department IN LVM	Technical reference	Created by SPC	Approved by	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>			
	Document type Datasheet	Document status Released		customer			
	Title	Document number					
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Main terminal diagram



9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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Responsible department	Technical reference	Created by	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>		
	Document type Wiring diagramm			Document status Released		
	Title			Document number WDS-240320-151128		
Restricted				Rev. AA	Creation date 2024-03-20	Language en
						Page 1/1

