



INDUCTION MOTOR DATA SHEET

90 kW 6 P 280S

MODEL:		CUSTOMER :		COIL SPEC NO.:		REV. NO : 0	
APPLICATION:		PROJECT NAME:			QUANTITY : SETS		
GENERAL DATA				PERFORMANCE DATA			
FRAME NO.		280S		OUTPUT		90 kW	
ENCLOSURE		☐ DRIP PROOF		POLES		6 POLES	
		☒ TOTALLY ENCLOSED		ROTOR TYPE		SQUIRREL CAGE	
		☐ Increased Safety Exp.-proof		STARTING METHOD		☐ D.O.L ☒ Y-△	
PROTECTION		IP 55				☐ REACTOR (%TAP) ☐ V.V.V.F	
METHODS OF COOLING		☐ SC ☒ FC ☐		RATED VOLTAGE		☐ VECTOR-DRIVE	
PHASE		3 PHASE				440 V V	
SERVICE FACTOR		1.15		FREQUENCY		60 Hz	
INSULATION CLASS		F CLASS		CURRENT			
TEMP. RISE AT FULL LOAD (at S.F 1.0)				NO LOAD		A A	
				FULL LOAD		148.0 A A	
				STARTING		961.9 A A	
LOCATION		☒ INDOOR ☐ OUTDOOR		EFFICIENCY			
ALTITUDE		1000 m		AT 1/2 LOAD		%	
HUMIDITY		80 %		AT 3/4 LOAD		%	
AMBIENT TEMPERATURE		-10~40 °C		AT FULL LOAD		95.0 %	
RATING		☒ CONT. ☐ S6 40%		POWER FACTOR			
NEMA DESIGN		B		AT 1/2 LOAD		%	
MOUNTING		☒ B3 ☐ B5 ☐ V1 ☐ B3B5		AT 3/4 LOAD		%	
BEARING		TYPE BALL / BALL		AT FULL LOAD		84.0 %	
		DEIN-DE 6318C3 / 6318C3		SPEED (AT FULL LOAD) 1170 rpm			
		LUBRICANT GREASE		TORQUE			
COUPLING METHOD		☒ DIRECT ☐ V-BELT		FULL LOAD		74.9 kg-m 100%	
ROTATION(Facing Drive End)		☐ CW ☒ CCW		LOCKED ROTOR		89.9 kg-m 120%	
SHAFT		EXTENSION SINGLE		BREAKDOWN		134.8 kg-m 180%	
				NOISE LEVEL		85.0 dB(A)	
				VIBRATION		30.0 μm	
EXTERNAL THRUST		-		ALLOWABLE LOAD GD² REFERRED TO MOTOR SHAFT			
TERMINAL BOX				(AT DIRECT ON-LINE) 585.0 kg-m²			
MAIN		☐ STEEL ☐ AL ☒ CAST		Motor GD² 12.5589 kg-m²			
AUX.		☐ YES ☒ NO		MOTOR APPROX. WEIGHT 800 kg			
BOX LOCATION		TOP (Viewed from Drive end)					
APPLICATION STANDARDS		KS.IEC		PAINTING		MUNSELL NO. 5 PB 2.5/8	
				THICKNESS		☒ STANDARD ☐ μm	
ACCESSORIES (OPTIONAL)				SUBMITTAL DRAWINGS			
TEMPERATURE DETECTOR				OUTLINE DIMENSION		DW-280STFCHTC-2	
WINDING		NO		TERMINAL BOX DIMENSION		TB-MC315N6-1	
		TYPE -		SPEED-TORQUE CURVE		ST-P90KV8T280S-1	
		BEARING NO					
TYPE		-					
		-					
SPACE HEATER		NO					
RATING		-					
NOTE				REMARKS			
1. THESE DATA ARE ONLY DESIGN VALUES AND SHALL BE GUARANTEED WITH TOLERANCE OF APPLICATION STANDARDS.				1. ABOVE ALL DATA ARE CALCULATED AT 100% VOLTAGE.			
2. OTHERS NOT MENTIONED IN THIS SHEET SHALL BE IN ACCORDANCE WITH HIGEN MOTOR STANDARD.				2. PREMIUM EFFICIENCY MOTOR.(IE3)			
TE : TOTALLY ENCLOSED		DP : DRIP PROOF		DATE		PREPARED	
FC : FAN COOLED		SC : SELF COOLED		2016.03.09		D.L.KIM	
				CHECKED		APPROVED	
				S.S.YUN		T.I.PARK	