ENGINEERING DATA

SCREW AIR COMPRESSOR

[MODEL: CAS25S]

230V/60Hz

REV.NO	DATE	WRITTEN BY	APPR.BY
0	8-Feb-19	H.D.HWANG	M.S. JU

COAIRE
Since 1968

CAS25S 230[V] 60[Hz] Engineering Data

Model		CAS25S03	CAS25S33
GENERAL OPERATING CONDITION			
Compression Gas	-		Air
Suction Pressure	atm		-
Location	-		Indoor
Ambient Temperature	°F		Max.104
Humidity	%		Below 85
GENERAL COMPRESSOR DATA			
Air Delivery[FAD]	CFM	100.0	86.8
Maximum Operating Pressure	Psi	100	130
Minimum Operating Pressure	Psi		65
Maximum Operating Temperature	°F		104
Minimum Operating Temperature	°F		23
AIREND DATA			
Model	-		EV06-NK
Type	-		Oil Injected, Single Stage
Compression Method	-		Rotary Positive Displace
Profile	-		-
Lobe Combition	-		-
Male Rotor Diameter	mm		
Male Rotor Speed	rpm	4000	3555
Capacity Control Method	-		LOAD-UNLOAD CONTROL by PT
Cooling Method	-		Oil Cooled
Air Cleaning System	-		10micron/99.9% Dry Paper
Oil Filtering System	-		10Micron/99.9% Spin-on Cartridge
Step up Method	-		Belt Drive
ELECTRICAL DATA			
Nominal Power - Main Drive	HP		25
- Fan Motor	HP		0.33
Maximum Applied Power	HP		29.1
Main Motor Enclosure	-		IP55
Nominal Current - Main Motor	Amps		60
Package Current @Full Load	Amps		60.9
Main Motor Service Factor	-		1.15
Main Motor Speed	rpm		3555
Main Motor Frame	-		284T
Main Motor Efficiency	%		91.7
Main Motor Power Factor	%		86
Fan Motor Efficiency	%		-
Fan Motor Power Factor	%		-
Main Supply Cable	AWG		7
Suggested Fuse Rating	Amps		75

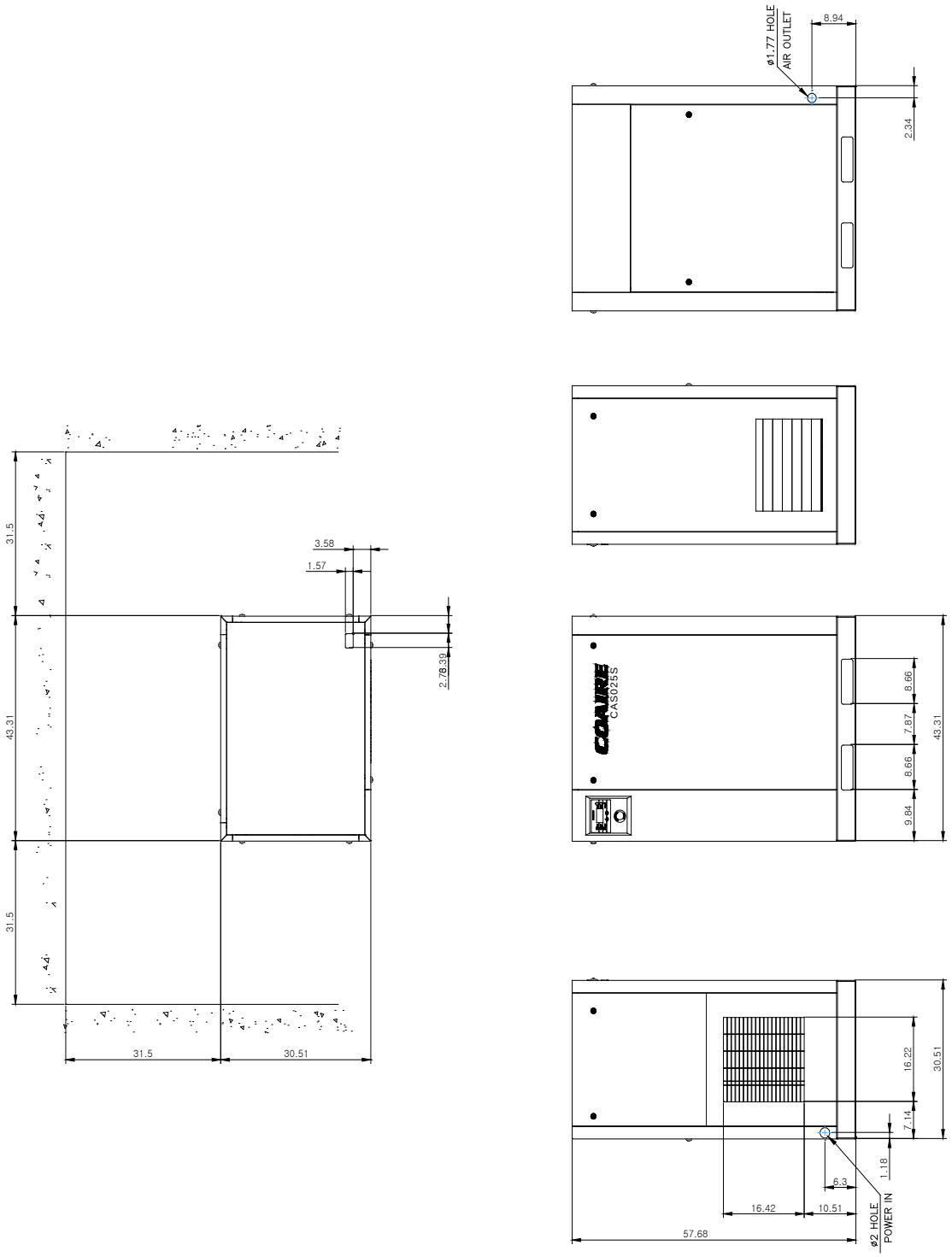
CAS25S 230[V] 60[Hz] Engineering Data

Model		CAS25S03	CAS25S33
COOLING DATA			
Ambient Temperature	°F		104
Max. Airend Discharge Temperatu	°F		230
Airend Injection Temperature	°F		149
Heat Removal-Oil Cooler	kW		13.3
Heat Removal-After Cooler	kW		2.4
Oil Flow	GPM		8.7
Cooling Air Flow	CFM		2223.9
Cooling Air CTD	°F		45
Service Air Temperature	°F		Max. Amb.+59
SOUND LEVEL			
Without Ventilation Duct	dB(A)		68
With Ventilation Duct	dB(A)		66
CONSTRUCTION FOUNDATION AND INSTALL DATA			
Air Delivery Pipe	A[B]		25(1)
Coolant Drain[Ball Valve]	A[B]		15(1/2)
Power Inlet[Diameter]	Inch(mm)		2(50)
COOLANT LUBRICATION DATA			
Coolant Sump Capacity	Gal		2.90
Total Coolant Fill Capacity	Gal		3.03
DIMENSIONS			
Overall Length	Inch(mm)		43.31(1100)
Overall Width	Inch(mm)		30.51(775)
Overall Height	Inch(mm)		57.68(1465)
SHIPPING DATA			
Dry Weight	LBS(kg)		1102.31(500)

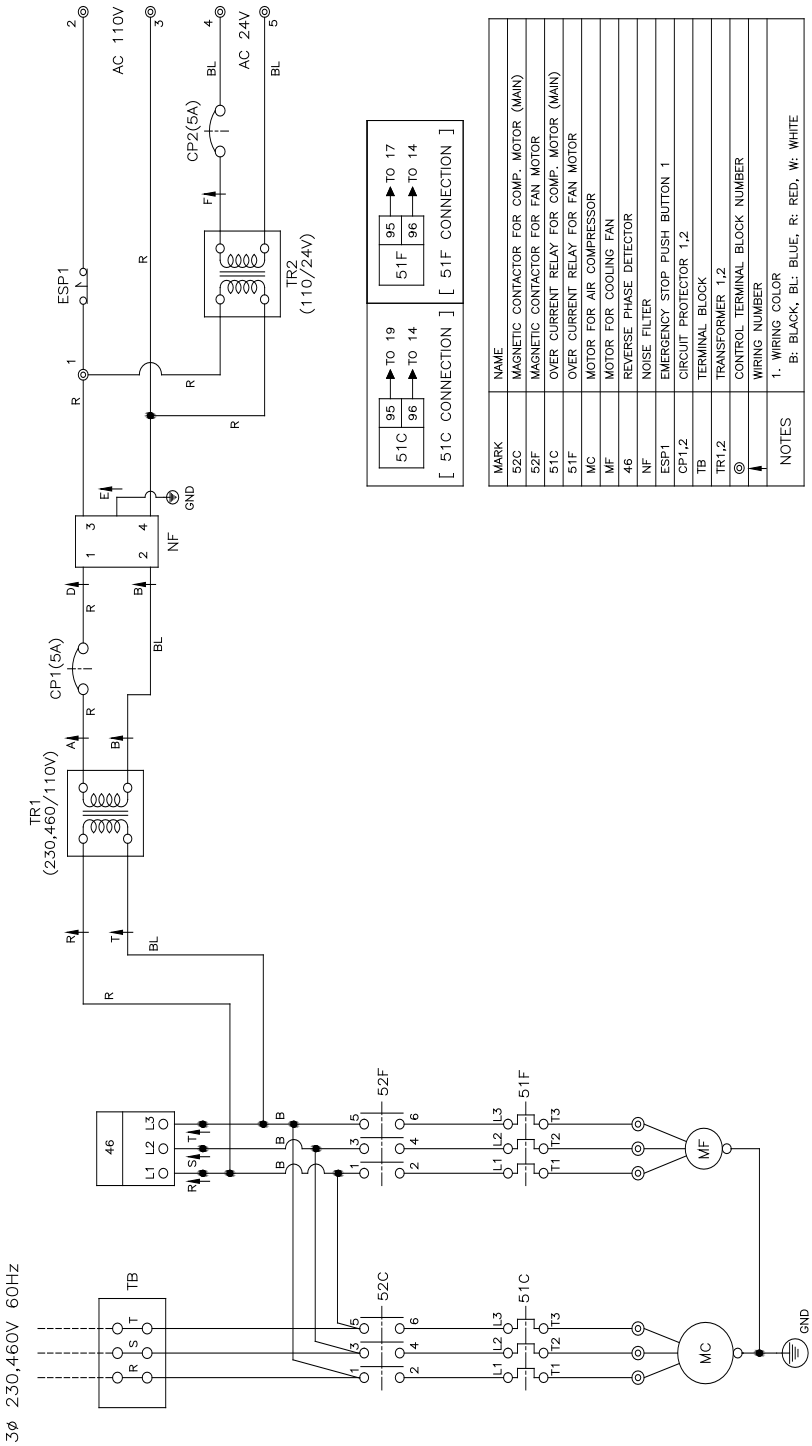
Note

1. FAD[Free Air Delivery] is full package performance including all losses.
   [Tested in accordance with ISO1217:1996 Annex C.]
2. Sound level is measured in free field conditions in accordance with PNEUROP/CAGI test codes.
3. Controller : Standard Full Micom
4. Motor Starter : D.O.L (Direct On Line)
5. Measured at nominal motor power.
6. Main Supply Cable : CV1C
7. CTD : Coolant Temperature Differential

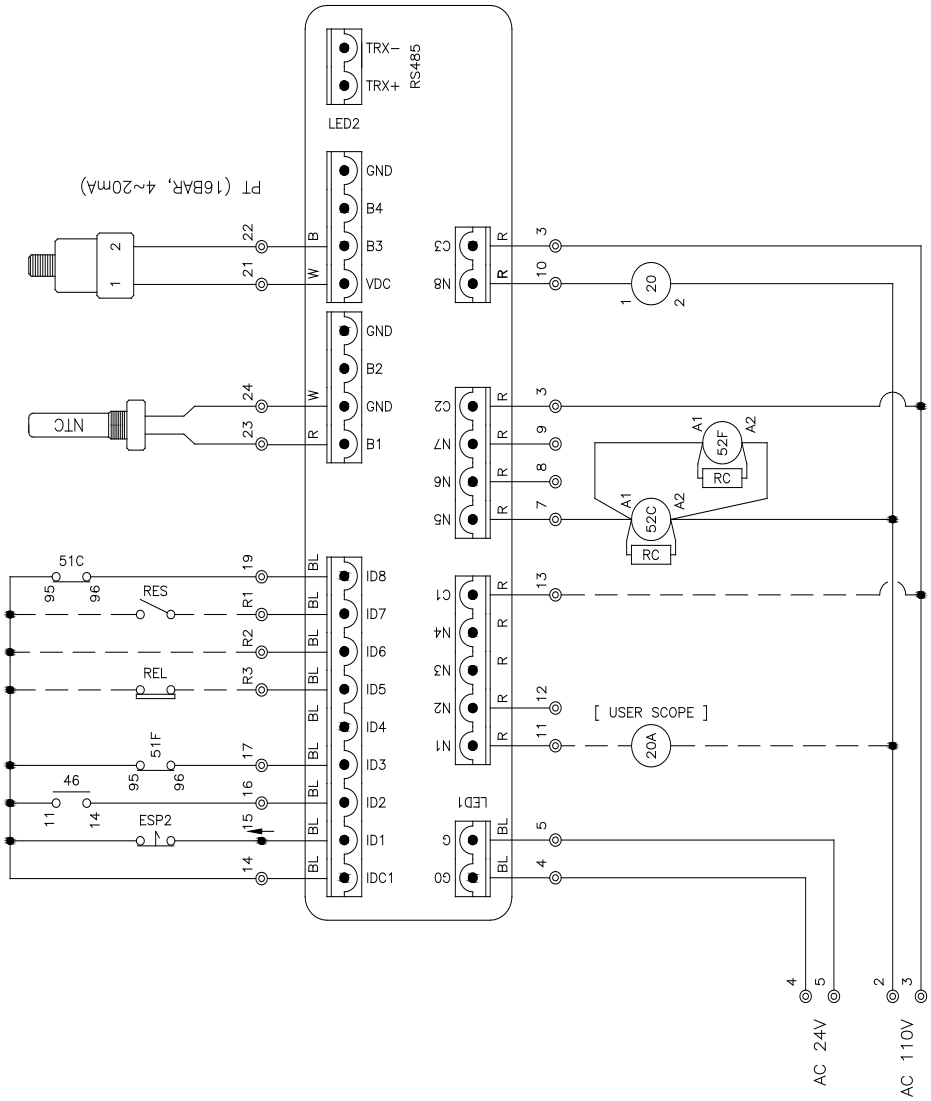
CAS25S 230[V] 60[Hz] Outside Demension Drawing



CAS25 230[V] 60[Hz] Electric Drawing [Power and Motor]



MARK	NAME
52C	MAGNETIC CONTACTOR FOR COMP. MOTOR (MAIN)
52F	MAGNETIC CONTACTOR FOR FAN MOTOR
51C	OVER CURRENT RELAY FOR COMP. MOTOR (MAIN)
51F	OVER CURRENT RELAY FOR FAN MOTOR
MC	MOTOR FOR AIR COMPRESSOR
MF	MOTOR FOR COOLING FAN
46	REVERSE PHASE DETECTOR
NF	NOISE FILTER
ESP1	EMERGENCY STOP PUSH BUTTON 1
CP1,2	CIRCUIT PROTECTOR 1,2
TB	TERMINAL BLOCK
TR1,2	TRANSFORMER 1,2
◎	CONTROL TERMINAL BLOCK NUMBER
▲	WIRING NUMBER
NOTES	1. WIRING COLOR B: BLACK, BL: BLUE, R: RED, W: WHITE

CAS25S 230[V] 60[Hz] Electric Drawing [Control Parts]

MARK	NAME	MARK	NAME
52C	MAGNETIC CONTACTOR FOR COMP. MOTOR (MAIN)	RC	RC CIRCUIT
52F	MAGNETIC CONTACTOR FOR FAN MOTOR	46	REVERSE PHASE DETECTOR
51C	OVER CURRENT RELAY FOR COMP. MOTOR (MAIN)	PT	PRESSURE TRANSMITTER
51F	ELECTRONIC OVER CURRENT RELAY FOR FAN MOTOR	NTC	TEMPERATURE SENSOR
RES	REMOTE START/STOP	20	SOLENOID COIL FOR SUCTION V/V
REL	REMOTE LOAD/UNLOAD	20A	SOLENOID COIL FOR DRAIN V/V (OPTION)
ESP2	EMERGENCY STOP PUSH BUTTON 2	↑	WIRING NUMBER
◎	CONTROL TERMINAL BLOCK NUMBER		
NOTES 1. WIRING COLOR – B: BLACK, BL: BLUE, R: RED, W: WHITE