



Project: Factory Loading	Consultant:
Location:	Date:
PERFORMANCE SUMMARY	Tag: July ACDS040 230V
	Location:



Scroll Compressor Air Cooled Package Chiller

Model #	ACDS040ANGS
Quantity	2 Rating version
Manufacturer	ACDG14 DBUSA

Physical Specifications

Compressor Qty	4	Shipping weight (lb)	3,387
Length (in)	116.00	Operating weight (lb)	3,413
Width (in)	89.00	Refrigerant	R-410a
Height (in)	88.00	Approx. refrigerant charge (lb)	101

Conditions of service

Percent of full load	100%	Compressor power (kW)	44.04
Capacity (Tons)	46.43	Total Fan Power (kW)	9.600
Unit power (kW)	53.64	Cooling Efficiency (EER, Btu /W.hr)	10.39
		IPLV.IP (EER, Btu /W.hr)	14.29

Evaporator

Fluid	Water	Leaving fluid temp. (°F)	44.00
Fluid flow rate (USgpm)	111.1	Fouling factor (h-ft ² -°F/Btu)	0.000100
Entering fluid temp. (°F)	54.00	Pressure drop (psi/ft.H ₂ O)	8.05/18.6
		Fluid freezing point (°F)	32.00

Condenser

Design ambient (°F)	95.0	Altitude (ft)	0.000
		Fan Motor Power (kW) (Qty)	2.400 (4)

Electrical characteristics

Unit power supply	208-230V/3ph/60Hz	Unit min. circuit ampacity (A)	179.0
Control power	115V/1ph/60Hz	Unit max inrush	439.0
Unit max. fuse/HACR CB size (A)	200.0	Comp. rated load amps (A)	35.0(4)
Unit rated load amps	170.0	Comp. locked rotor amps (A)	304.0(4)

Notes

- Certified in accordance with the AHRI Air Cooled Water-Chilling Packages Using the Vapor Compression Cycle Certification Program, which is based on AHRI Standard-550/590(I-P) and AHRI Standard 551/591(SI). Certified units may be found in the AHRI Directory at www.ahrirectory.org.
- Meets ASHRAE 90.1-2019 Path A chiller minimum efficiency guidelines
- Please consult factory for lead time.
- Refrigerant charge may vary. Unit nameplate will show final factory charge.
- The electrical data is being projected base on 95F ambient temperature, Please consult factory for all other ambient temperature

IPLV.IP Points at Standard AHRI Rating Conditions

% Full load	Tons	Unit kW	Comp. kW	Fan kW	Evap. EFT	Evap. LFT	EER	Ambient(°F)
100%	46.43	53.64	44.04	9.600	54.00	44.00	10.39	95.0
75%	34.82	33.25	25.16	8.090	51.50	44.00	12.57	80.0
50%	23.22	18.31	14.26	4.050	49.00	44.00	15.22	65.0
25%	11.61	8.110	6.140	1.970	46.50	44.00	17.18	55.0

Sound Data

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	Total dB(A)
Sound Pressure Level (free field) at 32.80 ft	32	42	49	56	59	58	58	52	64

*Sound Pressure Level (free field) ± 2 dB(A) Tolerance

Standard Equipment

Unit Construction	Hermetic Scroll Compressors
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- Unit shall be constructed of heavy gauge G90 galvanized steel
- All sheet metal parts are painted with oven baked epoxy / polyester powder paint, sustaining 1000 hour salt spray test in accordance with ASTM B-117
- Strap on belt type crankcase heater or sump heater
- Compressor staging on all units
- One (1) year warranty. (Factory provides standard warranty of 12 months from start up or 18 months from shipment date)



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- Control panel IP54

whichever occurs first. Limited to parts replacement only and excludes freight, taxes/duties, labours, consumable items, etc. Machine must be well maintained by DB authorized service representative.)

Air Cooled Condenser

- None
- Subcooling circuit(s)
- Direct drive fans with internal motor protection
- Standard operation to 45°F ambient using fan cycling

Evaporator

- Braze Plate Heat Exchanger(Optional Shell & Tube Heat Exchanger)
- Single and True Dual Evaporator
- Plate material AISI 316
- Fully insulated

Code Compliance

- Units conform to NEC, NEMA, ANSI/ASHRAE 15
- Units conform and certified to ANSI/UL Std. 1995 & CAN/CSA Std. C22.2 No.236 (ETL Listed)

Controls

- DB Director microcomputer controller on all models
- Two line 16 character alpha numeric display control functions
- Compressor loading/staging based on leaving fluid temperature
- Evaporator fluid freeze protection
- High and low pressure protection
- Staggered starting of compressors
- Anti-recycle timing in controller
- Fan cycling
- Accepts remote start & stop signal
- 0 to 5 VDC chilled water reset signal (standard)
- Keyboard accessed LCD readouts, continuously updated
- Discharge and suction pressure for all circuits

Optional Equipment/Service Included

Factory Mounted Options Included

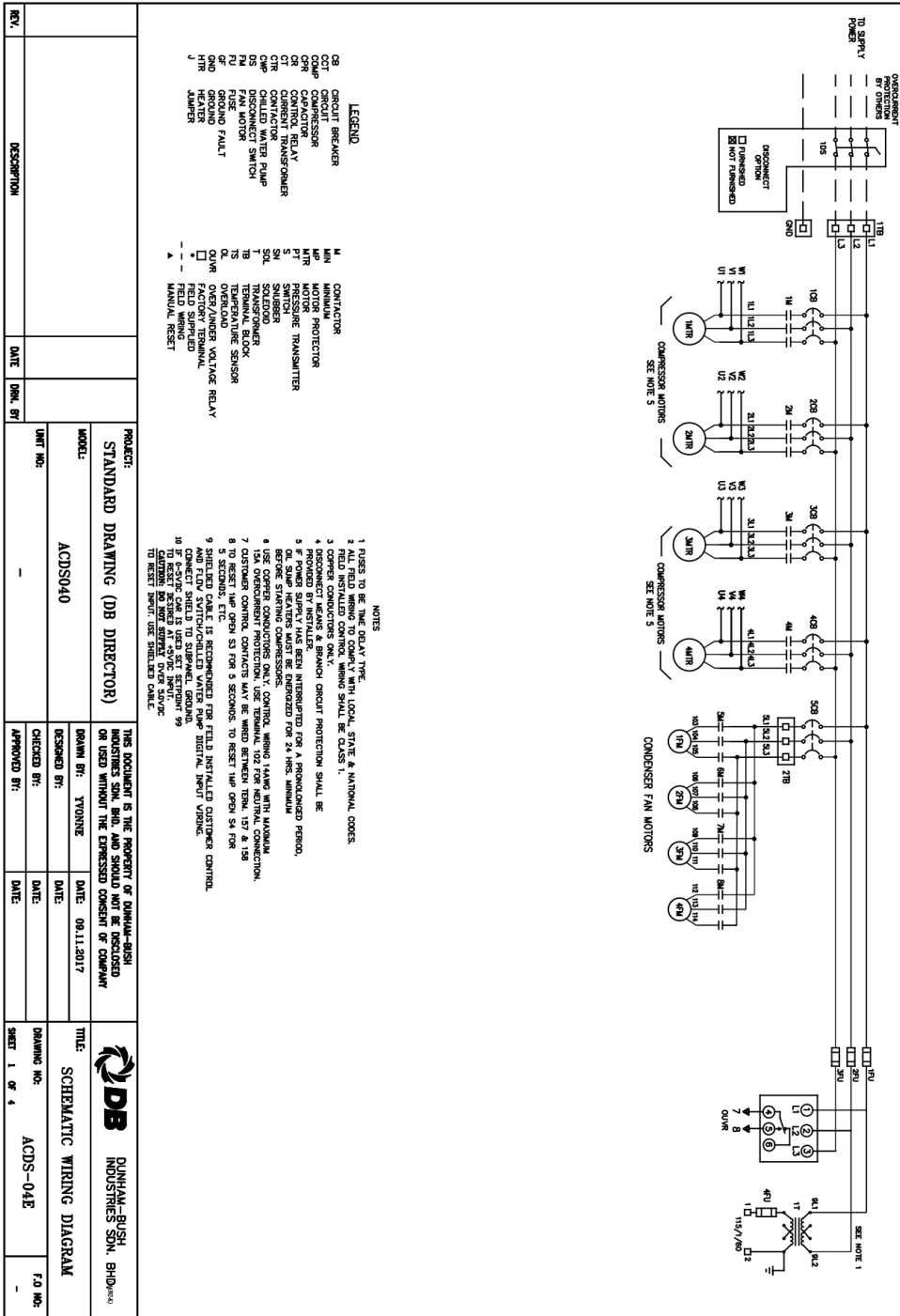
- Hot Gas By-Pass
- Protective grille condenser (LUV). For the maximum protection of condenser fins.

Accessories (Shipped Loose)

- Rubber-in-shear isolators (RIS) - designed for ease of installation, these rubber, one piece, molded isolators have skid resistant baseplates. Applicable for most installations.



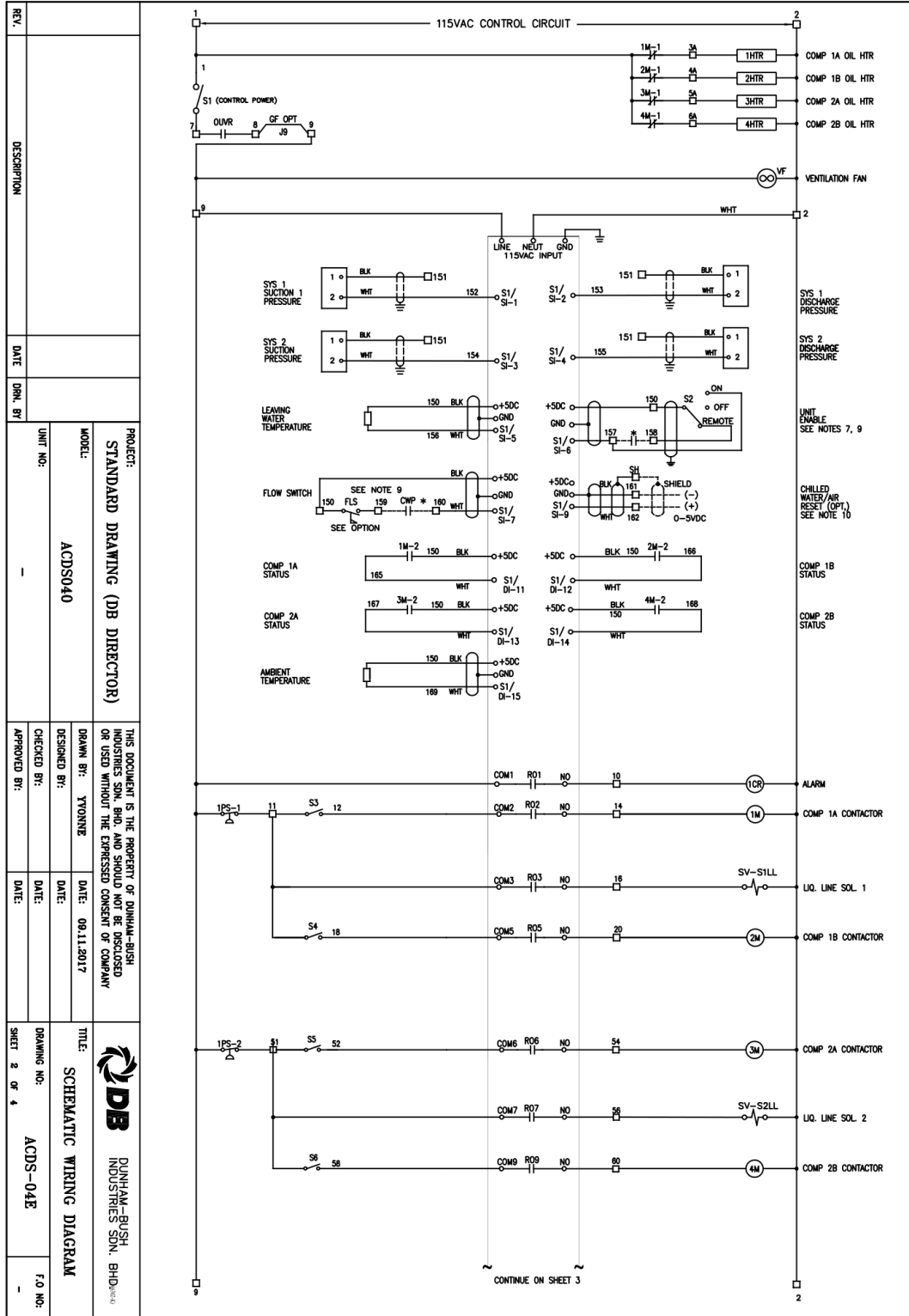
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400/200/400	MODEL	ACDS040S
	POWER SUPPLY	400/200/200
	COMPRESSOR RLA	340
	COMPRESSOR FLA	420
	CONDENSER FAN MOTOR 2A TO 20 LRA	200
	CONDENSER FAN MOTOR 10 TO 10 LRA	4.0A
	CONDENSER FAN MOTOR 10 TO 10 FLA	3.0A
	UNIT RLA	350A
	UNIT LRA	350A
	UNIT LRA	300A



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