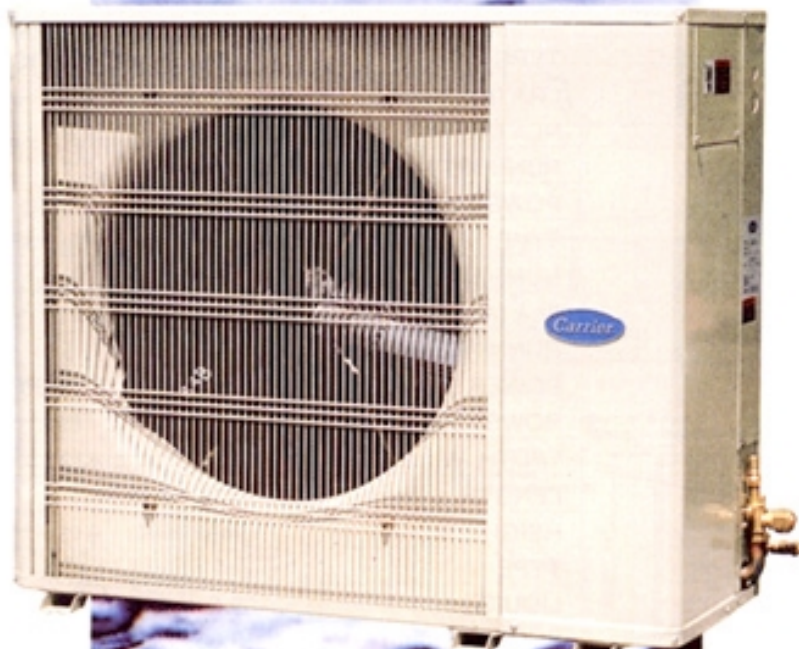




38HDT - PRODUCT DATA DIGEST

AIR COOLED CONDENSING UNITS



QUALITY SYSTEM



MALAYSIA
MS ISO 9001
REG. NO: AR 0239

From Carrier The New Slim, Elegant, And Super Quiet "OLYMPIA" 38HDT Air-Cooled Condensing Unit.

FEATURES:

- All models is housed in the Chassis "1" cabinet with small foot print advantages for reduced space requirement.
- Carrier all weather cabinet, powder painted & with-standing minimum 500 hours of salt spray test as per ASTM B117.
- Fully Hermetic reciprocating compressor - engineered for efficient and dependable operation.
- Compressor with built-in thermal overload protector against high current or temperature. High/Low pressure switches and Crankcase heater ensure safety and long-term reliability.
- Built-in Solid-State Anti-Short cycle 5 minutes Timer.
- Separate insulated compressor compartment - ensures quiet operation.
- Advanced technology lanced sine wave fin pattern with large L-shape coil ensures high EER performance.
- Standard 230V controls.
- Flare liquid & suction service valves ensure fast and easy installation and servicing (38HDT036 to 38HDT060).
- Direct driven propeller fan for horizontal air discharge.
- Metal fan guard offers quick access and easy maintenance with low noise characteristics.
- Aesthetically designed - pleasant and practical.

SPECIFICATIONS:

MODEL		38HDT036	38HDT048	38HDT060	38HDT070
TYPE		AIR-COOLED CONDENSING UNIT			
NOMINAL CAPACITY (kW*)		10.6	14.1	17.6	20.5
POWER CONSUMPTION (CDU) (kW*)		3.5	4.5	6.2	7.7
OPERATING CURRENT (CDU) (Amp*)		6.8	8.2	11.4	13.7
REFRIGERANT		R - 22			
POWER SOURCE (V-Ph-Hz) NOMINAL		400 - 3 - 50			
CDU EER		10.3	10.7	9.7	9.1
ABS. MIN - MAX VOLTAGE (V)		342 - 440			
COMPRESSOR	TYPE	FULLY HERMETIC RECIPROCATING			
	LRA (A)	37	55	70	69
	RLA (A)	6.0	7.8	10.6	16.4
	RUNNING AMPS (A)*	5.4	6.7	9.9	12.2
	POWER SUPPLY	400 - 3 - 50			
FAN MOTOR	TYPE	PERMANENT SPLIT CAPACITOR			
	NUMBER	1	1	1	1
	FLA (A)	1.45	1.45	1.45	1.45
	RUNNING AMPS (A)*	1.4	1.5	1.5	1.5
	POWER SUPPLY	230 - 1 - 50			
CONDENSER COIL	ROWS - FINS/m	2 - 591	2 - 591	2 - 591	3 - 591
DIMENSIONS	WIDTH, W (mm)	432	432	432	432
	LENGTH, L (mm)	1130	1130	1130	1130
	HEIGHT, H (mm)	945	945	945	945
CONNECTIONS	TYPE	FLARE			SWEAT
	LIQUID (mm)	9.5	9.5	9.5	9.5
	SUCTION (mm)	19.05	19.05	19.05	28.58
NET WEIGHT (kg)		95	99	107	110
EXTERNAL FINISH		ALPINE MIST			
SOUND PRESSURE LEVEL dB(A) **		65	66	67	67
PROTECTION DEVICES		THERMAL OVERLOAD, CRANKCASE HEATER, HP/LP SWITCHES, TIMER			

FLA: FULL LOAD AMPS.

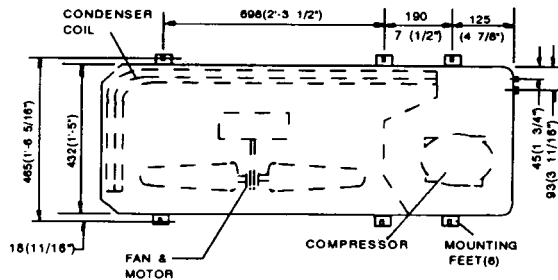
LRA : LOOKED ROTOR AMPS.

RLA: RATED LOAD AMPS

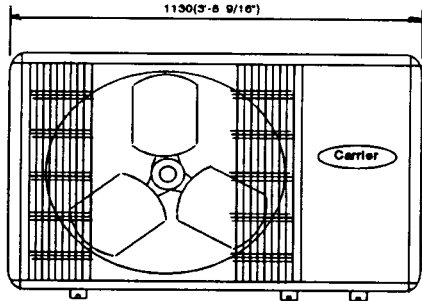
* DATA RATED TO JIS STANDARD AT 35°C (95°F) AMBIENT, 26.7°C / 19.4°C (80°F / 67°F) INDOOR CONDITION.

** DATA IS MEASURED AT 1m FRONT OF THE UNIT & 1m ABOVE THE GROUND.

DIMENSION DRAWING



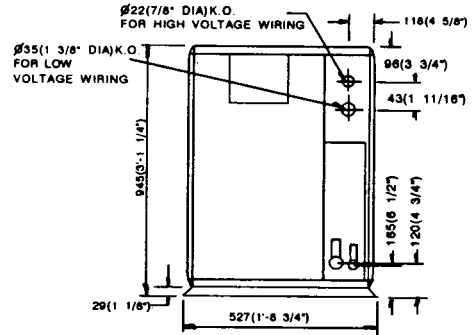
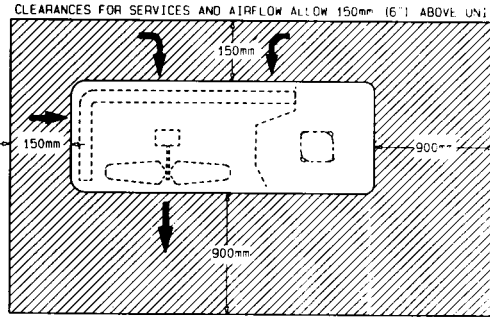
TOP VIEW



FRONT VIEW

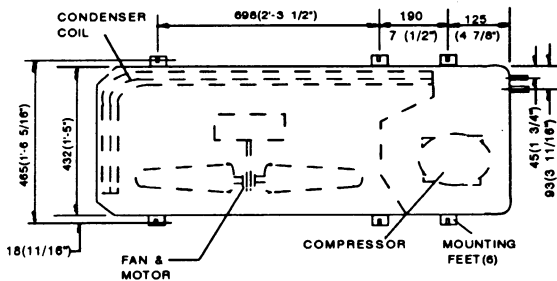
NOTES:

1. DIMENSIONS IN () ARE IN FEET-INCH
2. AIR DIRECTION →
3. FOOT-PRINT 0.56m (6.02 sq ft)

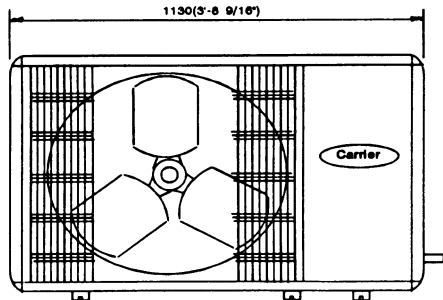


RIGHT SIDE VIEW

38HDT036 - 060 Dimensional Drawing



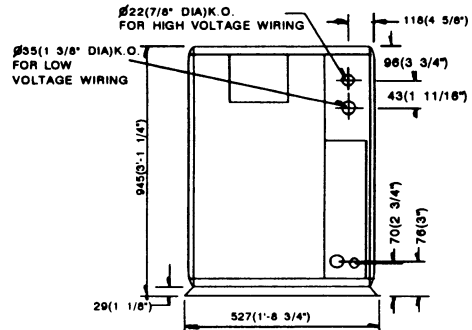
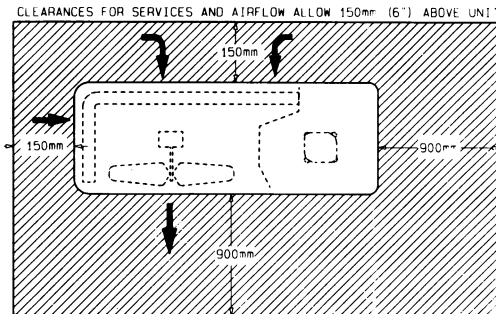
TOP VIEW



FRONT VIEW

NOTES:

1. DIMENSIONS IN () ARE IN FEET-INCH
2. AIR DIRECTION →
3. FOOT-PRINT 0.58m (6.02 sq ft)



RIGHT SIDE VIEW

Drawings not to scale

38HDT070 Dimensional Drawing

SELECTION PROCEDURE

1. Determine cooling load requirements

GIVEN:

Total Cooling Load 13.50 kW
 Sensible Heat Load 9.0 kW
 Indoor Air Quantity 400 l/s

Evaporator Air Entering:

Wet-Bulb Temperature(ewb) 19.4°C
 Dry-Bulb Temperature(edb) 27°C
 Ambient Temperature 35°C

2. Select a system for combination rating which will meet cooling requirements.

Enter combination ratings at 19.4°C indoor ewb and 35°C condenser air entering temperature. At high speed of 431.9 l/s indoor air quantity, 38HDT048 / 42AR048 has a total gross cooling capacity of 14.07 kW and gross sensible heat capacity of 9.61 kW. Bypass factor is 0.02.

Corrected Sensible Heat Capacity (SHC):
 $= 9.61 + 431.9 \times 1.23 (1 - 0.02) (27 - 26.7) / 1000$
 $= 9.77 \text{ kW}$

Unit power consumption is 4.60 kW.

ELECTRICAL DATA

MODEL NUMBER	POWER SUPPLY V-Ph-Hz	PERMISSIBLE VOLTAGE RANGE	COMPRESSOR		FAN MOTOR FLA	UNIT	
			LRA	RLA		MCA	MOCP
38HDT036	400 - 3 - 50	342 - 440	37	6.0	1.45	8.95	15.0
38HDT048	400V - 3 - 50	342 - 440	55	7.8	1.45	11.2	19.0
38HDT060	400 - 3 - 50	342 - 440	70	10.6	1.45	14.7	25.3
38HDT070	400 - 3 - 50	342 - 440	69	16.4	1.45	22.0	38.4

FLA : Full Load Amps.

LRA : Locked Rotor Amps.

MOCP : Maximum Overcurrent Protection.

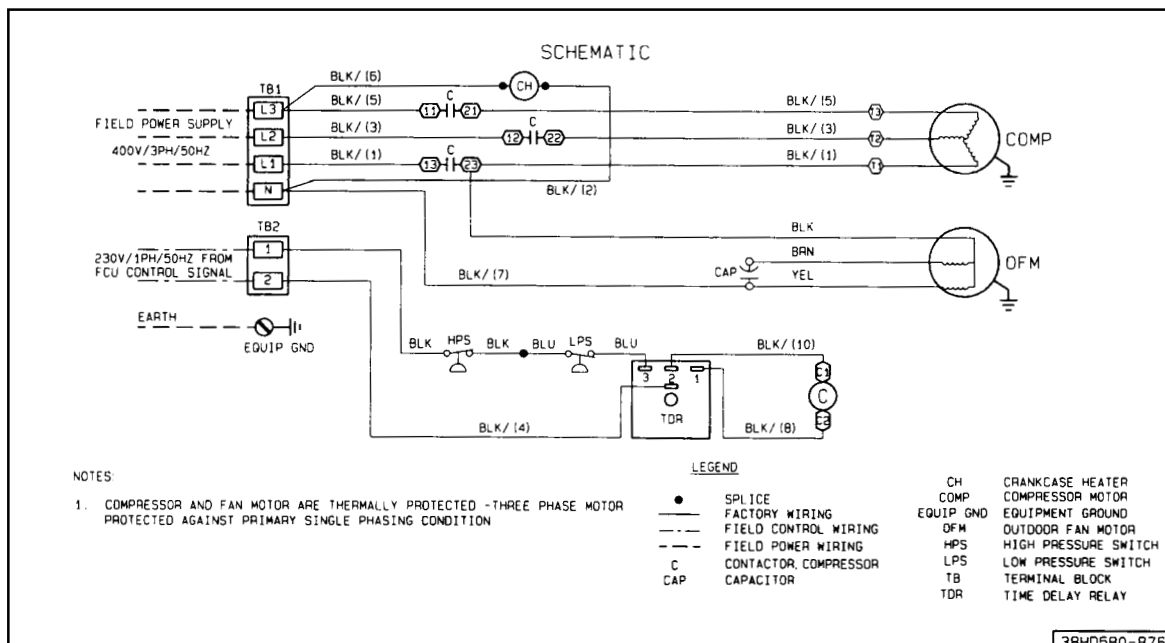
RLA : Rated Load Amps.

MCA : Minimum Circuit Amps.

Note: i) MCA values are used for sizing the field supplied wires.

ii) MOCP values are used for sizing the field supplied standard fuses or circuit breakers.

WIRING DIAGRAM



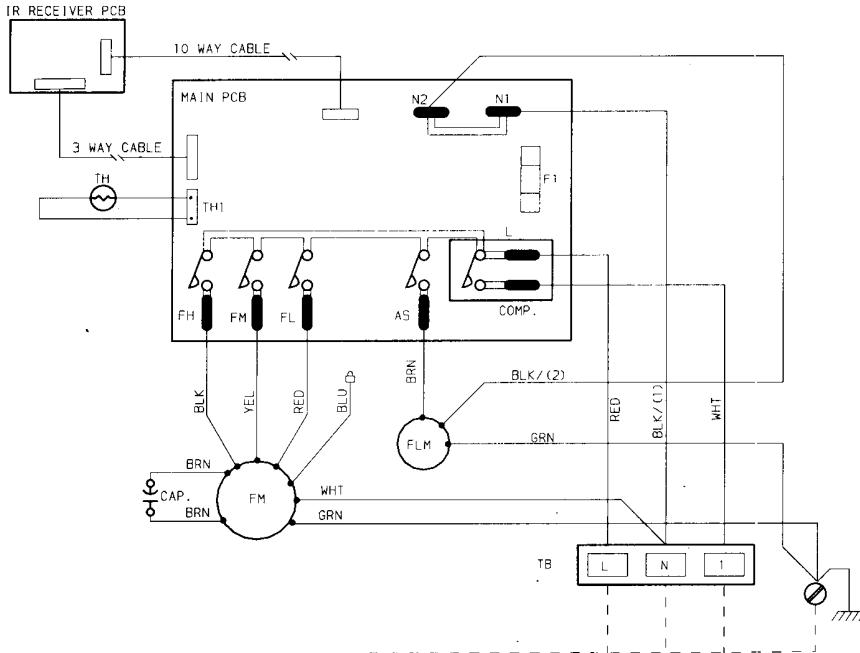
38HDT036, 048, 060 & 070 Wiring Diagram

38HDT036-D-91125 C/W 42AR-036---72125
 38HDT048-D-91125 C/W 42AR-048---72125
 38HDT060-D-91125 C/W 42AR-060---72125
 38HDT070-D-91125 C/W 42AR-070---72125

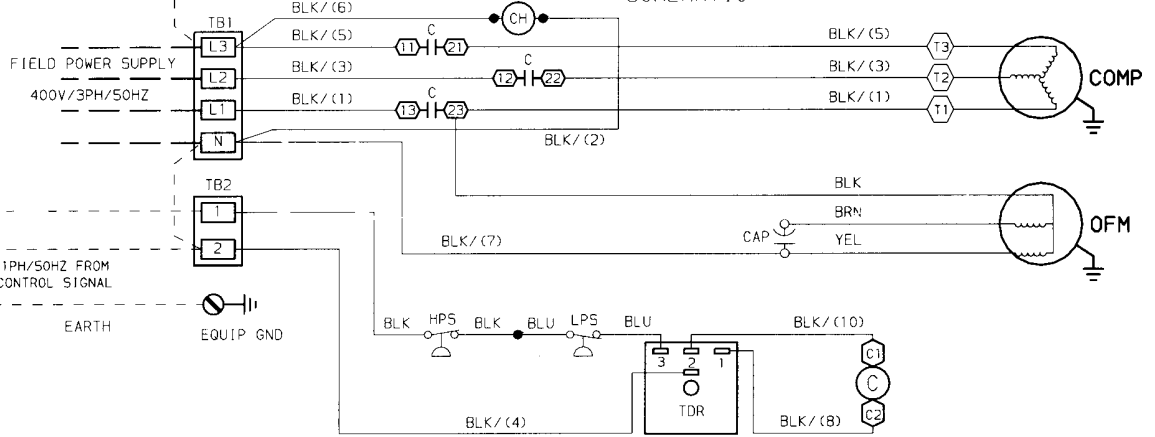
LEGEND

- TH — THERMISTOR
- FLM — FLAP MOTOR
- FM — FAN MOTOR
- F1 — FUSE
- PCB — PRINTED CIRCUIT BOARD
- IR — INFRA-RED
- EQUIPMENT GROUND
- QUICK CONNECT TERMINAL (MARKED)
- PRINTED CIRCUIT BOARD CONNECTION
- FACTORY WIRING
- FIELD WIRING
- L — LIVE
- N — NEUTRAL
- RELAY
- CH — CRANKCASE HEATER
- COMP — COMPRESSOR MOTOR
- EQUIP GND — EQUIPMENT GROUND
- OFM — OUTDOOR FAN MOTOR
- HPS — HIGH PRESSURE SWITCH
- LPS — LOW PRESSURE SWITCH
- TB — TERMINAL BLOCK
- SC — START CAPACITOR
- — SPLICE
- C — CONTACTOR, COMPRESSOR
- CAP — CAPACITOR
- SR — START RELAY
- FCU — FAN COIL UNIT

INDOOR UNIT



OUTDOOR UNIT SCHEMATIC



NOTES:

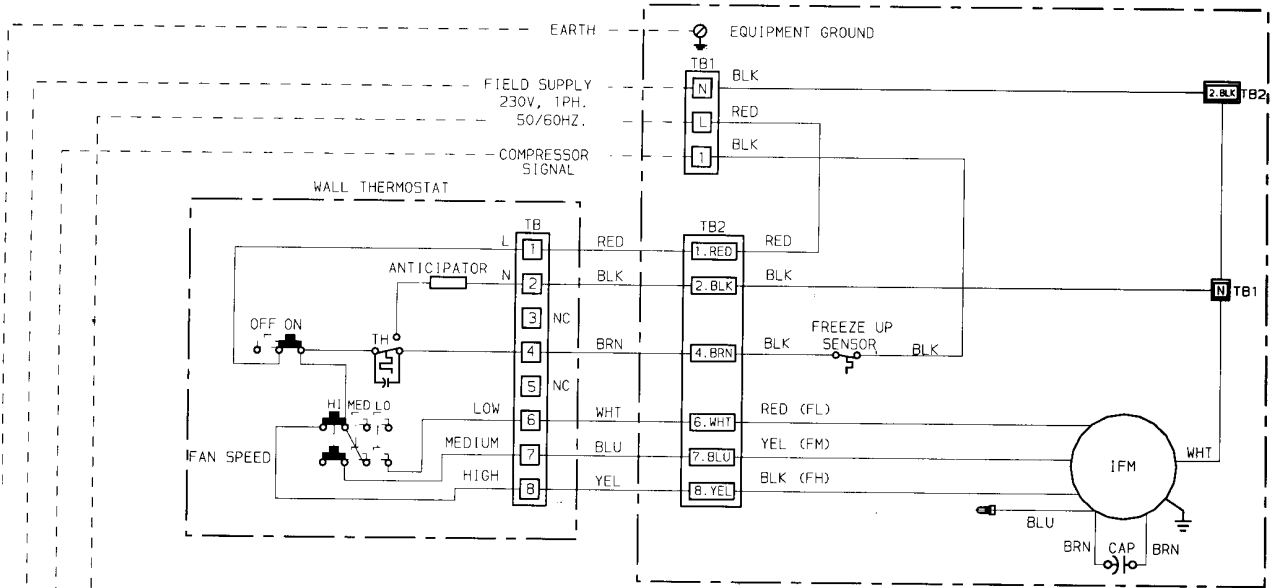
1. COMPRESSOR AND FAN ARE THERMALLY PROTECTED—THREE PHASE MOTOR PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITION.
2. WIRE IN ACCORDANCE WITH NATIONAL ELECTRIC CODES (NEC) AND LOCAL CODES MUST REPLACE ANY ORIGINAL WIRES WITH 105 °C WIRE OR IT'S EQUIVALENT.

Schematic System Wiring Diagram

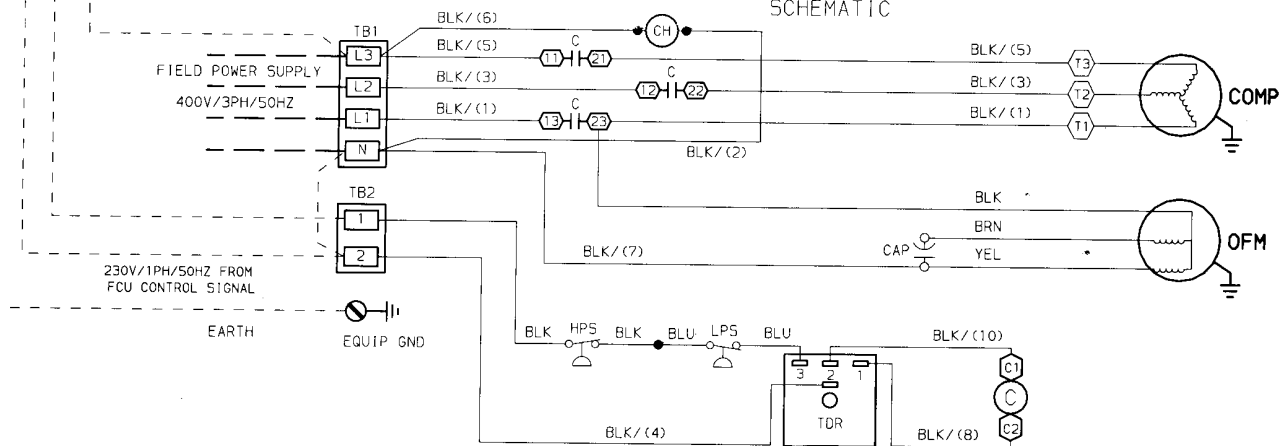
38HDT036-D-91125 C/W 42ARM036---72125
 38HDT036-D-91125 C/W 42ARM036---72125
 38HDT060-D-91125 C/W 42ARM060---72125
 38HDT070-D-91125 C/W 42ARM070---72125

INDOOR UNIT

42ARM FAN COIL UNIT



OUTDOOR UNIT
SCHEMATIC



NOTES:

1. COMPRESSOR AND FAN ARE THERMALLY PROTECTED-THREE PHASE MOTOR PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITION.
2. WIRE IN ACCORDANCE WITH NATIONAL ELECTRIC CODES (NEC) AND LOCAL CODES MUST REPLACE ANY ORIGINAL WIRES WITH 105 °C WIRE OR IT'S EQUIVALENT.
3. ⚡ INDICATES DEVICE IS CONNECTED TO EQUIPMENT GROUND.
4. FAN MOTOR IS INTERNALLY PROTECTED.

LEGEND

- | | | | | | | | |
|---|---------------------------|------|-------------------------|-----|------------------------|-----|--------------------|
| ○ | — TERMINAL (UNMARKED) | C | — CONTACTOR, COMPRESSOR | HPS | — HIGH PRESSURE SWITCH | R | — RELAY |
| ⊠ | — TERMINAL BLOCK (MARKED) | CAP | — CAPACITOR | LPS | — LOW PRESSURE SWITCH | TB | — TERMINAL BLOCK |
| — | — FACTORY WIRING | CH | — CRANKCASE HEATER | L | — LIVE | TDR | — TIME DELAY RELAY |
| — | — FIELD POWER WIRING | COMP | — COMPRESSOR MOTOR | N | — NEUTRAL | TH | — THERMOSTAT |
| — | — FIELD CONTROL WIRING | IFM | — INDOOR FAN MOTOR | NC | — NOT CONNECTED | | |
| — | — UNIT BOUNDARY | FH | — FAN HIGH SPEED | | | | |
| — | — PCB TRACK | FM | — FAN MED SPEED | | | | |
| ⊔ | — WIRE TERMINATION | FL | — FAN LOW SPEED | | | | |
| ⊕ | — EQUIPMENT GROUND | | | | | | |
| ● | — SPLICE | | | | | | |

Schematic System Wiring Diagram

PERFORMANCE DATA COOLING CAPACITIES

38HDT036/42AR036 OR 42ARM036 SYSTEM COOLING CAPACITIES

(SI-50Hz)

TEMPERATURE (°C) AIR ENTERING CONDENSER		EVAPORATOR AIR (l/s) : B.F.								
		273.8 : 0.03			323.3 : 0.04			401.2 : 0.05		
		EVAPORATOR AIR ENTERING WET BULB (°C)								
		16.7	19.4	22.2	16.7	19.4	22.2	16.7	19.4	22.2
25	TCG	9.53	10.52	11.61	10.02	11.05	12.16	10.61	11.67	12.81
	SHG	7.39	6.45	5.51	8.06	6.95	5.83	9.03	7.68	6.30
	KW	3.03	3.12	3.20	3.11	3.20	3.28	3.22	3.30	3.39
30	TCG	9.09	10.05	11.11	9.56	10.55	11.64	10.08	11.11	12.22
	SHG	7.15	6.24	5.28	7.83	6.74	5.60	8.79	7.44	6.07
	KW	3.17	3.26	3.36	3.25	3.34	3.44	3.36	3.45	3.55
35	TCG	8.68	9.58	10.61	9.09	10.05	11.08	9.58	10.55	11.64
	SHG	6.92	6.01	5.07	7.59	6.51	5.39	8.53	7.21	5.83
	KW	3.31	3.41	3.51	3.39	3.49	3.59	3.50	3.60	3.71
40	TCG	8.21	9.12	10.08	8.62	9.53	10.52	9.09	9.99	11.02
	SHG	6.68	5.80	4.87	7.36	6.27	5.16	8.27	6.98	5.60
	KW	3.44	3.55	3.67	3.52	3.63	3.75	3.64	3.75	3.86
46	TCG	7.53	8.47	9.44	7.91	8.88	9.82	8.38	9.29	10.26
	SHG	6.36	5.51	4.60	7.01	5.98	4.89	7.94	6.68	5.33
	KW	3.60	3.72	3.85	3.69	3.81	3.94	3.81	3.92	4.05

TCG - Gross Cooling Capacity (kW)
SHG - Gross Sensible Heat Capacity (kW)

KW - Unit Total Input (kW)
BF - Bypass Factor

38HDT048/42AR048 OR 42ARM048 SYSTEM COOLING CAPACITIES

(SI-50Hz)

TEMPERATURE (°C) AIR ENTERING CONDENSER		EVAPORATOR AIR (l/s) : B.F.								
		330.4 : 0.02			377.6 : 0.02			431.9 : 0.02		
		EVAPORATOR AIR ENTERING WET BULB (°C)								
		16.7	19.4	22.2	16.7	19.4	22.2	16.7	19.4	22.2
25	TCG	13.22	14.60	16.06	13.78	15.18	16.65	14.30	15.71	17.18
	SHG	10.41	9.12	7.77	11.20	9.70	8.15	12.05	10.32	8.53
	KW	3.72	3.86	4.01	3.81	3.96	4.10	3.91	4.05	4.20
30	TCG	12.49	13.89	15.36	13.04	14.45	15.94	13.54	14.95	16.44
	SHG	10.02	8.76	7.47	10.82	9.35	7.86	11.67	9.99	8.24
	KW	3.98	4.13	4.30	4.07	4.23	4.40	4.17	4.33	4.50
35	TCG	11.67	13.07	14.57	12.19	13.60	15.09	12.66	14.07	15.59
	SHG	9.61	8.38	7.12	10.38	8.97	7.50	11.23	9.61	7.91
	KW	4.24	4.41	4.58	4.34	4.50	4.69	4.44	4.60	4.79
40	TCG	10.79	12.16	13.63	11.26	12.63	14.16	11.72	13.10	14.63
	SHG	9.17	7.97	6.74	9.94	8.56	7.12	10.76	9.20	7.53
	KW	4.51	4.69	4.88	4.61	4.79	4.98	4.71	4.88	5.08
46	TCG	9.61	10.93	12.40	10.05	11.37	12.87	10.49	11.75	13.25
	SHG	8.59	7.44	6.24	9.35	8.03	6.62	10.14	8.65	7.03
	KW	4.85	5.04	5.24	4.95	5.13	5.34	5.05	5.23	5.44

TCG - Gross Cooling Capacity (kW)
SHG - Gross Sensible Heat Capacity (kW)

KW - Unit Total Input (kW)
BF - Bypass Factor

PERFORMANCE DATA COOLING CAPACITIES (CONT')

38HDT060/42AR060 OR 42ARM060 SYSTEM COOLING CAPACITIES

(SI-50Hz)

TEMPERATURE (°C) AIR ENTERING CONDENSER		EVAPORATOR AIR (l/s) : B.F.								
		380.0 : 0.03			434.7 : 0.03			540.0 : 0.04		
		EVAPORATOR AIR ENTERING WET BULB (°C)								
		16.7	19.4	22.2	16.7	19.4	22.2	16.7	19.4	22.2
25	TCG	15.92	17.59	19.34	16.59	18.29	20.11	17.59	19.29	21.16
	SHG	12.28	10.76	9.17	13.16	11.40	9.58	14.71	12.54	10.32
	KW	5.03	5.25	5.49	5.15	5.38	5.63	5.36	5.59	5.84
30	TCG	15.12	16.85	18.61	15.80	17.53	19.29	16.79	18.47	20.28
	SHG	11.84	10.41	8.85	12.75	11.05	9.26	14.33	12.19	9.99
	KW	5.26	5.50	5.76	5.39	5.63	5.90	5.60	5.85	6.11
35	TCG	14.27	15.97	17.79	14.89	16.65	18.47	15.86	17.59	19.40
	SHG	11.40	9.99	8.50	12.28	10.64	8.91	13.86	11.81	9.64
	KW	5.50	5.75	6.02	5.64	5.89	6.16	5.84	6.10	6.38
40	TCG	13.31	15.01	16.85	13.92	15.65	17.50	14.80	16.53	18.41
	SHG	10.90	9.53	8.09	11.81	10.20	8.50	13.37	11.37	9.26
	KW	5.77	6.02	6.31	5.89	6.16	6.44	6.10	6.36	6.66
46	TCG	12.08	13.75	15.53	12.60	14.30	16.15	13.45	15.12	17.00
	SHG	10.29	8.97	7.56	11.17	9.61	8.00	12.66	10.79	8.73
	KW	6.10	6.38	6.67	6.23	6.50	6.81	6.44	6.71	7.02

TCG - Gross Cooling Capacity (kW)
SHG - Gross Sensible Heat Capacity (kW)

KW - Unit Total Input (kW)
BF - Bypass Factor

38HDT070/42AR070 OR 42ARM070 SYSTEM COOLING CAPACITIES

(SI-50Hz)

TEMPERATURE (°C) AIR ENTERING CONDENSER		EVAPORATOR AIR (l/s) : B.F.								
		493.2 : 0.03			575.8 : 0.04			729.2 : 0.05		
		EVAPORATOR AIR ENTERING WET BULB (°C)								
		16.7	19.4	22.2	16.7	19.4	22.2	16.7	19.4	22.2
25	TCG	16.94	18.61	20.40	17.70	19.40	21.22	18.73	20.46	22.33
	SHG	13.25	11.52	9.70	14.36	12.34	10.23	16.27	13.75	11.14
	KW	6.16	6.47	6.80	6.35	6.66	7.00	6.62	6.94	7.29
30	TCG	16.30	17.91	19.64	17.00	18.64	20.40	17.97	19.61	21.43
	SHG	12.93	11.17	9.38	14.04	11.99	9.91	15.92	13.39	10.79
	KW	6.60	6.92	7.26	6.78	7.11	7.47	7.06	7.39	7.76
35	TCG	15.65	17.20	18.88	16.30	17.88	19.58	17.20	18.79	20.49
	SHG	12.57	10.84	9.06	13.69	11.67	9.56	15.53	13.04	10.43
	KW	7.05	7.40	7.77	7.25	7.60	7.97	7.53	7.88	8.26
40	TCG	14.83	16.47	18.08	15.50	17.09	18.73	16.41	17.94	19.58
	SHG	12.19	10.52	8.73	13.28	11.31	9.23	15.15	12.69	10.08
	KW	7.53	7.91	8.31	7.73	8.11	8.51	8.03	8.40	8.80
46	TCG	13.78	15.39	17.06	14.39	16.00	17.67	15.24	16.79	18.44
	SHG	11.64	10.02	8.32	12.75	10.84	8.82	14.54	12.22	9.67
	KW	8.16	8.56	9.00	8.35	8.76	9.20	8.66	9.06	9.50

TCG - Gross Cooling Capacity (kW)
SHG - Gross Sensible Heat Capacity (kW)

KW - Unit Total Input (kW)
BF - Bypass Factor

PERFORMANCE DATA COOLING CAPACITIES (CONT')

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. Capacities include indoor fan motor heat.
3. SHG is based on 26.7°C db/19.4°C wb for air entering indoor coil. At any other temperature, correct the SHG reading from the table of cooling capacities as follows:

BELOW 26.7°C db, **SUBTRACT** (Corr. Factor x l/s) from SHG

ABOVE 26.7°C db, **ADD** (Corr. Factor x l/s) to SHG

$$\text{Correction Factor} = \frac{1.23 (1 - \text{BF}) (\text{db} - 26.7)}{10^3}$$

4. "INPUT" includes both outdoor and indoor unit input.
5. Capacities based on 5m long tubing with 1m level difference and applicable to outdoor unit voltage range of 342V to 440V.
6. Operating limit: Entering air temperature to condenser should be in the range of 25°C to 46°C (75°F to 115°F). Not recommended to operate outside this range.

 NOT RECOMMENDED FOR SUSTAINED OPERATION IN THIS REGION.

The above system capacity is rated to JIS at rated voltage.

AIR COOLED CONDENSING UNIT PERFORMANCE RATING

38HDT036 AIR COOLED CONDENSING UNIT CAPACITIES

(SI-50Hz)

SST (°C)		AIR TEMPERATURE ENTERING CONDENSER (°C)				
		25	30	35	40	46
-1	TCG	8.97	8.24	7.52	6.79	6.07
	SDT	33.56	38.33	43.89	48.89	53.89
	KW	2.59	2.76	2.93	3.07	3.19
0	TCG	9.43	8.68	7.93	7.19	6.44
	SDT	33.95	38.74	44.30	49.30	54.30
	KW	2.62	2.80	2.97	3.13	3.25
4	TCG	11.26	10.43	9.61	8.75	7.93
	SDT	35.56	40.39	45.43	50.43	55.43
	KW	2.74	2.95	3.15	3.34	3.50
8	TCG	13.06	12.13	11.21	10.29	9.37
	SDT	37.10	41.98	46.98	51.98	56.98
	KW	2.86	3.10	3.33	3.54	3.74
10	TCG	13.98	13.00	12.03	11.08	10.11
	SDT	37.78	42.78	47.78	52.78	57.78
	KW	2.92	3.17	3.42	3.64	3.86

TCG - Gross Cooling Capacity (kW)
KW - Power Input At Rated Voltage

SDT - Saturated Discharge Temperature (°C)
SST - Saturated Suction Temperature (°C)

38HDT048 AIR COOLED CONDENSING UNIT CAPACITIES

(SI-50Hz)

SST (°C)		AIR TEMPERATURE ENTERING CONDENSER (°C)				
		25	30	35	40	46
-1	TCG	11.87	10.93	10.05	9.14	8.26
	SDT	41.11	46.11	51.11	56.67	61.67
	KW	3.24	3.44	3.63	3.80	3.96
0	TCG	12.39	11.44	10.53	9.60	8.69
	SDT	41.73	46.73	51.73	57.08	62.08
	KW	3.30	3.51	3.71	3.89	4.06
4	TCG	14.50	13.46	12.44	11.42	10.41
	SDT	43.72	48.72	53.72	58.72	63.72
	KW	3.56	3.80	4.03	4.23	4.44
8	TCG	16.58	15.44	14.32	13.21	12.08
	SDT	46.03	51.03	55.87	60.87	65.87
	KW	3.81	4.08	4.33	4.57	4.81
10	TCG	17.64	16.44	15.30	14.13	12.95
	SDT	47.22	52.22	56.67	61.67	66.67
	KW	3.95	4.23	4.49	4.75	5.00

TCG - Gross Cooling Capacity (kW)
KW - Power Input At Rated Voltage

SDT - Saturated Discharge Temperature (°C)
SST - Saturated Suction Temperature (°C)

NOTES:

- Interpolation is permissible. Do not extrapolate.
- Saturated Suction Temperature (SST) shown correspond to pressure at compressor, actual suction temperature is higher due to superheat.

The above unit cooling capacity is rated to JIS at rated voltage.

AIR COOLED CONDENSING UNIT PERFORMANCE RATING (CONT')

38HDT060 AIR COOLED CONDENSING UNIT CAPACITIES

(SI-50Hz)

SST (°C)		AIR TEMPERATURE ENTERING CONDENSER (°C)				
		25	30	35	40	46
-1	TCG	15.01	13.83	12.66	11.55	10.38
	SDT	38.33	43.33	48.33	53.33	58.33
	KW	4.62	4.80	4.97	5.13	5.26
0	TCG	15.71	14.51	13.30	12.14	10.95
	SDT	38.95	43.95	48.95	53.74	58.74
	KW	4.74	4.93	5.10	5.27	5.40
4	TCG	18.51	17.20	15.86	14.56	13.25
	SDT	40.95	45.95	50.95	55.86	60.86
	KW	5.22	5.43	5.63	5.81	5.98
8	TCG	21.24	19.81	18.36	16.92	15.49
	SDT	43.25	48.10	53.10	57.70	62.54
	KW	5.69	5.91	6.13	6.34	6.53
10	TCG	22.63	21.13	19.64	18.11	16.62
	SDT	44.44	48.89	53.89	58.89	63.33
	KW	5.93	6.16	6.38	6.61	6.81

TCG - Gross Cooling Capacity (kW)
KW - Power Input At Rated Voltage

SDT - Saturated Discharge Temperature (°C)
SST - Saturated Suction Temperature (°C)

38HDT070 AIR COOLED CONDENSING UNIT CAPACITIES

(SI-50Hz)

SST (°C)		AIR TEMPERATURE ENTERING CONDENSER (°C)				
		25	30	35	40	46
-1	TCG	17.49	16.27	15.07	13.91	12.57
	SDT	38.33	43.23	47.78	52.22	57.68
	KW	6.01	6.28	6.59	6.90	7.18
0	TCG	18.39	17.14	15.88	14.68	13.29
	SDT	39.11	43.71	48.21	52.70	58.12
	KW	6.14	6.43	6.75	7.07	7.36
4	TCG	21.77	20.33	18.94	17.58	15.99
	SDT	40.99	45.77	50.31	54.77	60.21
	KW	6.70	7.01	7.38	7.74	8.08
8	TCG	25.07	23.50	21.95	20.44	18.66
	SDT	43.33	47.67	52.14	56.54	61.89
	KW	7.32	7.48	7.89	8.29	8.67
10	TCG	26.75	25.11	23.47	21.90	20.03
	SDT	43.88	48.78	53.33	57.33	62.68
	KW	7.40	7.75	8.18	8.60	9.00

TCG - Gross Cooling Capacity (kW)
KW - Power Input At Rated Voltage

SDT - Saturated Discharge Temperature (°C)
SST - Saturated Suction Temperature (°C)

NOTES:

1. Interpolation is permissible. Do not extrapolate.
2. Saturated Suction Temperature (SST) shown correspond to pressure at compressor, actual suction temperature is higher due to superheat.

The above unit cooling capacity is rated to JIS at rated voltage.

GUIDE SPECIFICATIONS

Furnish and install air cooled condensing unit in the location and manner shown in IOM. The unit shall be properly assembled and tested at the factory. It shall be designed for use with refrigerant R-22 and shall be suitable for use with 400V - 3 Ø - 50Hz electrical supply.

The condensing unit shall have capacity of.....watts or more, with the temperature of air entering condenser at.....°C and a saturated suction temperature of.....°C.

The condenser coil shall be of non-ferrous construction such that it has aluminium plate fins with "Lanced Sine Wave" pattern mechanically bonded to seamless copper tubing. The unit shall be furnished with direct driven, propeller type fan arrangement for horizontal discharge. The unit shall have a fan guard build of metal and offers quick access and easy maintenance. The condenser fan motor shall have inherent protection and shall be of the permanently lubricated type.

The compressor shall be the fully-hermetic reciprocating type and shall come equipped with crankcase heater. The controls shall be factory wired and located in a separate enclosure. Safety devices shall consist of high and low pressure switches and compressor overload devices. Unit wiring shall incorporate a positive acting timer to prevent short cycling of compressor if power is interrupted.

Casing shall make unit fully weatherproofed for outdoor installation. The panels shall be manufactured from heavy gauge galvanized steel, phosphatised and finished in baked enamel powder paint.

The dimension of the entire assembly shall not be more than 945mm high, 1130mm length and 432mm width.



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