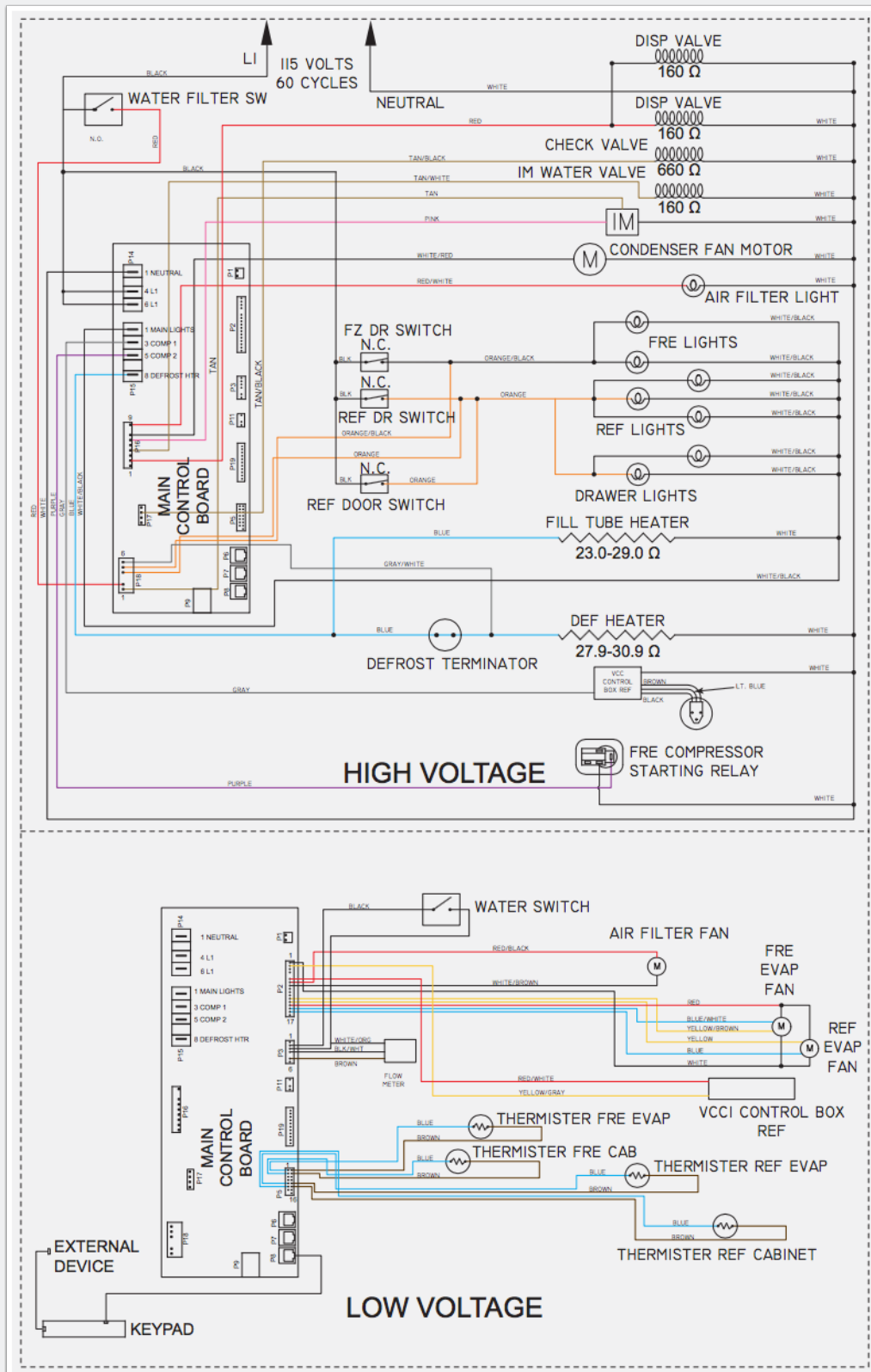


Acme Built-In Refrigerator Troubleshooting Problem

Service Call Request

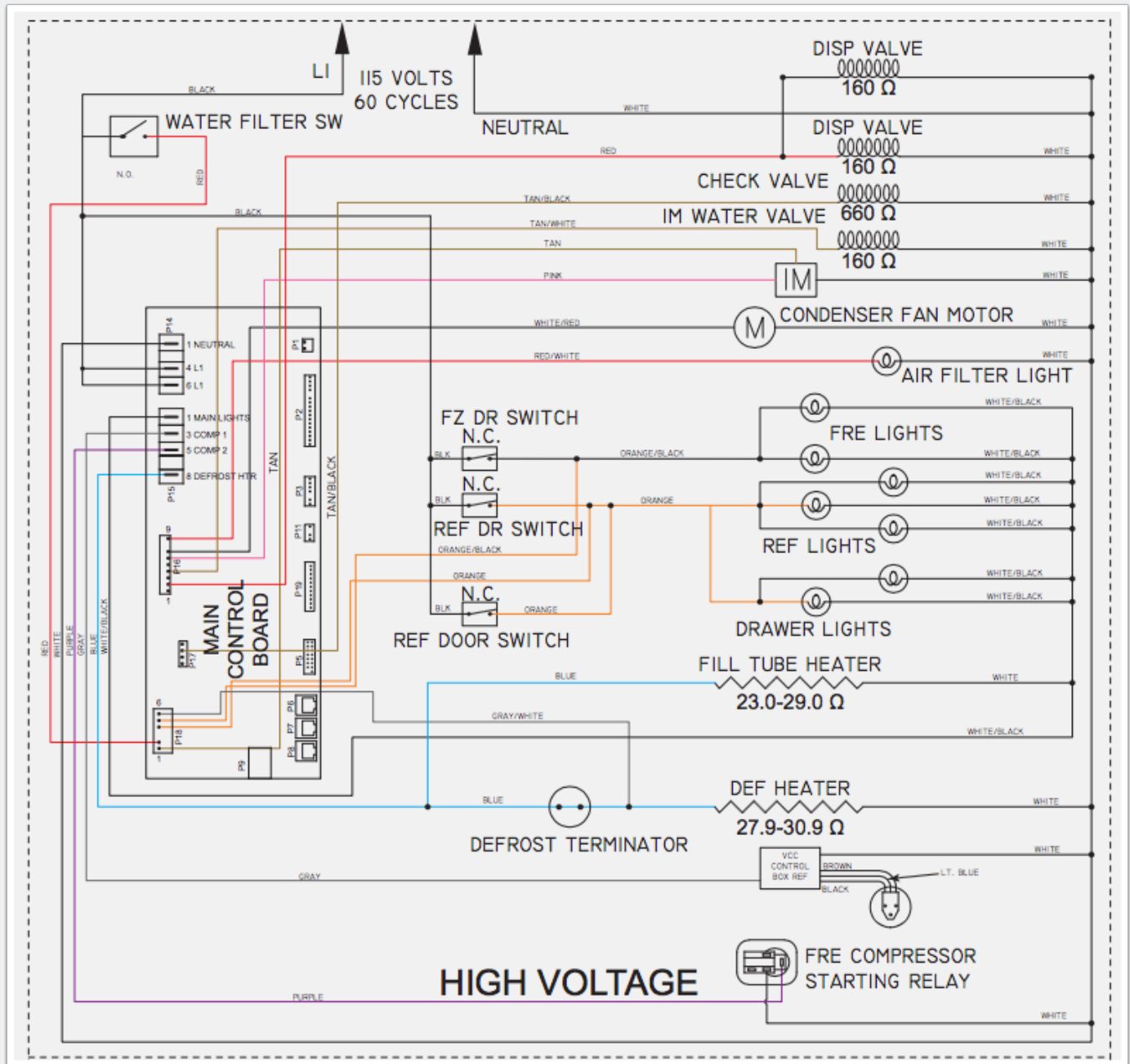
Acme Refrigerator MN 101010 (side by side), FF compartment warming up (currently 50F), FZ compartment fine. Husband hears the compressors running in the top compartment and feels air flow from the top. (CSR Note: Customer's husband is an engineering professor who teaches refrigeration at MIT and helped design this refrigerator. Has troubleshot the problem and found that the fan in the FF cmpt is not running. Says to be sure to bring an evap fan motor with you.)

Acme Built-In Refrigerator Troubleshooting Problem



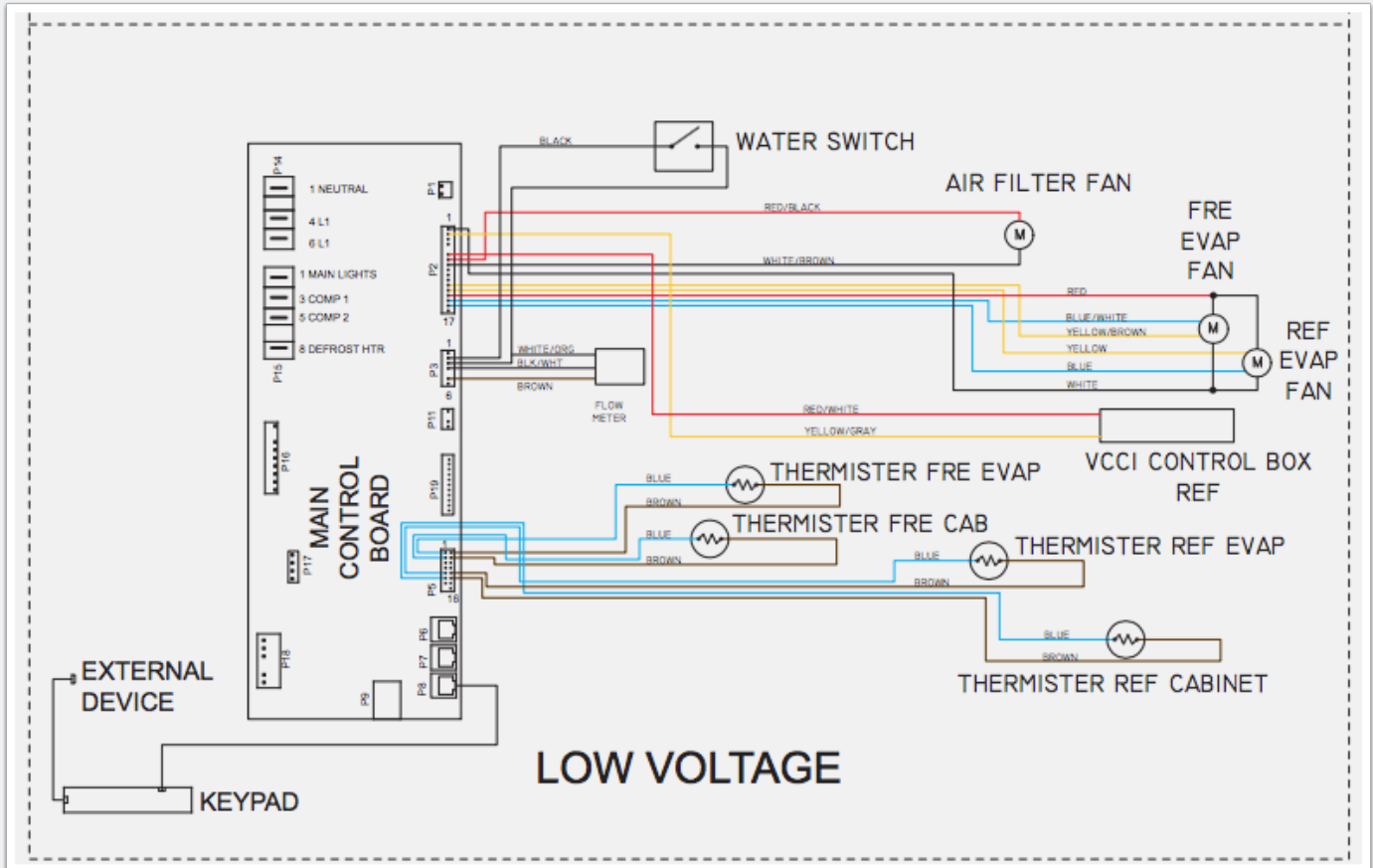
Acme Built-In Refrigerator Troubleshooting Problem

High Voltage Circuits Breakout



Acme Built-In Refrigerator Troubleshooting Problem

Low Voltage Circuit Breakouts



Acme Built-In Refrigerator Troubleshooting Problem

Fan and VCC Inverter Low Voltage Circuits

CIRCUIT	DESCRIPTION	FUNCTION	COLOR
LOW VOLTAGE CIRCUITS			
P1-2	FLIPPER SEAL HTR GRND RETURN	FLIPPER SEAL HTR RETURN	WHITE/YELLOW
P1-1	FLIPPER SEAL HTR 12V DC PWR	FLIPPER SEAL HTR POWER	BLACK/YELLOW
P2-17	UNUSED	UNUSED	--
P2-16	REF EVAPORATOR FAN	TACHOMETER INPUT	BLUE
P2-15	FRE EVAPORATOR FAN	TACHOMETER INPUT	BLUE/WHITE
P2-14	EVAP FAN 12V DC POWER	EVAPORATOR FAN POWER	RED
P2-13	REF EVAPORATOR FAN	PWM DRIVE OUTPUT	YELLOW
P2-12	FRE EVAPORATOR FAN	PWM DRIVE OUTPUT	YELLOW/BROWN
P2-11	VCC1	VCC1 PWM OUTPUT	RED/WHITE
P2-10	UNUSED	UNUSED	--
P2-9	UNUSED	UNUSED	--
P2-8	AIR FILTER FAN	AIR FILTER FAN RETURN	WHITE/BROWN
P2-7	AI FILTER FAN	AIR FILTER FAN OUTPUT	RED/BLACK
P2-6	UNUSED	UNUSED	--
P2-5	UNUSED	UNUSED	--
P2-4	UNUSED	UNUSED	--
P2-3	UNUSED	UNUSED	--
P2-2	VCC1	VCC1 POWER OUTPUT	YELLOW/GRAY
P2-1	EVAP FAN GROUND RETURN	EVAPORATOR FAN RETURN	WHITE

Acme Built-In Refrigerator Troubleshooting Problem

Specifications

Acme Built-In Refrigerator Troubleshooting Problem

Acme 101010 Refrigerator Specifications		REFRIGERATOR	FREEZER
CHARGE (R-134a Refrigerant) <i>NOTE: Amount may change, always check serial tag on unit.</i>		4.0 oz.	6.0 oz.
NORMAL OPERATING PRESSURES	Low Side High Side	0-12 psi to 30-42 psi 75 psi to 110 psi	5" vac-1 psi to 6-15 psi 75 psi to 120 psi
COMPRESSOR	Original Compressor Amps Original Compressor BTU's	0.8 +/- 30% 215	0.8 +/- 30% 408
DEFROST METHOD		"Fan Assisted, Off Cycle Defrost" Evap > 38-42°F before Compressor ON.	"Adaptive Defrost" Intervals and duration varies. Followed by 5 min. compressor delay.
DEFROST TERMINATOR	Cut-In Temp. Cut-Out Temp.	---- ----	30°F (-1°C) 55°F (13°C)
DEFROST HEATER	Watts Amps Ohms	---- ---- ----	450 4.0 27 - 33
FILL TUBE HEATER	Watts Amps Ohms	---- ---- ----	6.5 0.06 1830 - 2240
ISOLATION WATER VALVE	Watts Amps Ohms	---- ---- ----	20 0.2 260 +/- 10%
ICEMAKER WATER VALVE	Watts Amps Ohms	---- ---- ----	50 0.4 160 +/- 10%
THERMISTORS (Evaporator & Compartment)	Ohms at 32°F (0°C)	30000 - 33000	30000 - 33000