MRCOOL Advantage 3rd Gen Mini Split Error Codes

Display codes for MRCOOL Advantage 3rd Gen ductless mini splits covered by MRCOOL's Advantage user manual: what each code means, what to check first, and where to find the part. Newer MRCOOL generations show four-character codes such as EL 01 instead.

MRCOOL mini split parts: hvacexpressparts.com/brands/mrcool
Parts listed for models ending in 230B: hvacexpressparts.com/search?q=230B
Not sure which part? Match the number printed on your old part, or call (786) 223-7655, Mon–Fri 9 AM–5 PM ET.

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
Indoor unit			
E0	Indoor unit EEPROM parameter error.	Turn the unit off at the breaker for a few minutes and restart once. If the code returns, the indoor control board (the EEPROM chip is on the board).	control boards
E2	Zero-crossing signal detection error.	Restart once at the breaker. If the code returns, a technician checks the supply voltage, then the indoor control board (the zero-crossing circuit is on the board).	control boards
E3	Indoor fan speed out of control.	With the power off: the filter is clean and the blower wheel turns freely and is clean. Then the fan motor plug and the motor, then the indoor control board.	fan motors, blower wheels & fan blades, control boards
E4	Indoor room temperature sensor (T1) open or short circuit.	The sensor (thermistor) and its plug on the indoor board, with the power off. If the sensor reads correctly on its resistance chart, the indoor control board.	control boards
E5	Evaporator coil temperature sensor (T2) open or short circuit.	The sensor (thermistor) and its plug on the indoor board, with the power off. If the sensor reads correctly on its resistance chart, the indoor control board.	control boards
Communication			
E1	Communication error between the indoor and outdoor units.	Restart once at the breaker. If the code returns, a technician checks the communication wiring and terminals between the units (correct order, tight, dry), then the indoor or outdoor control board.	control boards
Outdoor unit			
F1	Outdoor ambient temperature sensor (T4) open or short circuit.	The outdoor sensor (thermistor) and its plug, with the power off: compare its resistance with the temperature chart. If it reads correctly, the outdoor control board.	control boards

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
F2	Condenser coil temperature sensor (T3) open or short circuit.	The outdoor sensor (thermistor) and its plug, with the power off: compare its resistance with the temperature chart. If it reads correctly, the outdoor control board.	control boards
F3	Compressor discharge temperature sensor (T5) open or short circuit.	The discharge temperature sensor (TP) and its plug, with the power off; then the outdoor control board.	discharge temperature sensor, control boards
F4	Outdoor unit EEPROM parameter error.	Turn the unit off at the breaker for a few minutes and restart once. If the code returns, the outdoor control board (the EEPROM chip is on the board).	control boards
F5	Outdoor fan speed out of control.	With the power off: the outdoor fan blade turns freely and nothing blocks it (ice, snow, debris). Then the motor plug and windings, then the fan drive on the outdoor control board.	fan motors, blower wheels & fan blades, control boards
Protection			
P0	IPM malfunction or IGBT over-current protection.	Outdoor airflow first: the coil is clean and nothing blocks the unit. If the code returns, a technician checks the supply voltage, then the inverter module / outdoor control board.	control boards
P1	Over-voltage or under-voltage protection.	The breaker and the outdoor disconnect first; restart once. If the code returns, a technician checks the supply voltage; if it is correct, the outdoor control board.	control boards
P2	Compressor top high-temperature protection (9k and 12k models).	Airflow first: the filters and both coils are clean and the fans run. Then a technician checks the refrigerant charge and the related temperature sensor.	fan motors
P4	Inverter compressor drive error.	A technician checks the compressor wires (U-V-W) and terminals, then the inverter module / outdoor board, then the compressor windings. Rule out the wiring and the module before replacing the compressor.	control boards, compressors
F0	Compressor overload current protection (MRCOOL's 1st–3rd generation list).	Airflow first: the filters and coils are clean and the outdoor fan runs. If the code returns, a technician checks the supply voltage and the compressor current, then the outdoor control board.	control boards
P3	Outdoor ambient temperature too low (MRCOOL's 1st–3rd generation list).	Usually the outdoor temperature is below the unit's heating range; it restarts when it warms up. If it is not that cold outside, a technician checks the outdoor ambient sensor (T4).	—
P6	Too much or too little refrigerant (MRCOOL's 1st–3rd generation list).	Refrigerant charge and leaks: a licensed (EPA 608) technician. Not a parts swap.	—
Alarms and status			
EC	Refrigerant leak detected.	Ventilate the room, switch the unit off and call a licensed (EPA 608) technician to find the leak. Not a parts swap.	—

CODE	WHAT IT MEANS	WHAT TO CHECK FIRST	PARTS
dF	Defrost operation in Heat mode.	Normal in Heat mode, not an error code. The indoor fan can pause while the outdoor coil defrosts; check only that the outdoor unit is clear of ice and snow.	—
cF / FP / SC	cF: anti-cold-air warm-up in Heat mode. FP: freeze-protection heating below 46°F (8°C). SC: self clean.	Normal display, not an error code.	—

Parts listed for MRCOOL Advantage 3rd Gen models

Each part page lists the unit models the part is matched to. Match the number printed on your old part before you order.

PART NUMBER	PART
17400516000851	Pressure switch
11002015A00096	Brushless DC motor
11002015000247	Outdoor brushless DC motor
11002015000150	Indoor brushless DC motor
11002015000051	Indoor brushless DC motor
11103020004360	DC inverter rotary compressor
11002015A01177	Brushless DC motor
11002015008646	Indoor brushless DC motor
11002015A01198	Brushless DC motor
11002015000366	Outdoor brushless DC motor
11103020A00736	DC inverter rotary compressor
11103020006879	DC inverter rotary compressor
11103020A00576	DC inverter rotary compressor
12100102000044	Cross flow fan
11001010000063	Water pump
11002015018558	Brushless DC motor
11002015012128	Outdoor brushless DC motor
11103020A00557	DC inverter rotary compressor
11103020003919	DC inverter rotary compressor
11002015A00817	Brushless DC motor
11002015008365	Outdoor brushless DC motor
11103020000559	DC inverter rotary compressor
11103020A00756	DC inverter rotary compressor

PART NUMBER	PART
11002015A01137	Brushless DC motor

Safety. Power checks and board work are for a qualified technician; refrigerant work requires EPA Section 608 certification.

Returns. Parts that were not installed, connected or used can be returned within 30 days: hvacexpressparts.com/refund-policy.

Source. Code meanings summarized in our own words from: MRCOOL, Advantage Series User Manual (document mc-adv-3-um-en-01, version V071420), sections Overview – Display and Troubleshooting – Indoor Unit Error Display; F0, P3 and P6 from MRCOOL's support article "Mini Split Systems Error Codes", table "Generations 1-3 Indoor Error Codes" (updated November 25, 2026). The same code can mean something else on other models; confirm it in your unit's documentation.

Other brands and models. Our mini split error codes guide: hvacexpressparts.com/blog/mini-split-error-codes-guide.

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