



Breakermatic Home Appliances

For Microwave ovens, washing machines, dishwasher, dryer and gas stoves

Overview

The **BREAKERMATIC Home Appliances** is designed to prevent damage caused by electrical variations to microwave ovens, washing machines, dishwasher, dryer and gas stoves up to 15A and 1875W.

Operation

1. Protection against steady-state voltage variations. The **BREAKERMATIC Home Appliances** disconnects the output if the steady-state voltage is above the high cut-off voltage or below the low cut-off voltage indicated in the specifications. The response time to a fault is delayed to 1 s to prevent false triggering. The voltage must remain outside the range longer than the response time for the disconnection to be activated. While the fault persists, the corresponding high or low voltage indicator will remain lit.
2. Reconnection delay or wait cycle. Upon energizing the protector, or upon termination of a voltage fault, the protector will initiate a time delay before connecting the output. The duration of the time delay is indicated in the specifications. The connection delay is designed to allow the power grid to stabilize after a service interruption, and to ensure the proper pressure equalization into the refrigeration system.
3. Detection of blackouts, "sag", etc. The protector will disconnect the load if it detects a sudden voltage drop below 50% of the nominal voltage and will initiate a standby cycle. The protector will disconnect the output almost instantaneously to prevent undesired transient voltages reach the protected equipment.
4. Suppression of fast transient over voltages. Transient over voltages are very short-duration, high-energy voltage spikes produced by the connection or disconnection of loads or induced by atmospheric discharges near the electrical grid. They propagate through it until they reach the equipment. The **BREAKERMATIC Home Appliances** trim transient over voltages between phase and neutral (differential mode) and between current-carrying lines and ground (common mode) without disconnecting the output. It clamps the transient voltages to the indicated voltage protection level.

Models

Model	Nominal voltage	Nominal amperage	Frequency	Cut off voltages	Reconnection delay	Response delay	Voltage protection level	Language
MIC150-150EST	120VAC	15A	50/60 Hz	95V-138V	5 s.	1 s	0.6kV	Español
MIC150-150UEM	120VAC	15A	50/60 Hz	95V-138V	5 s.	1 s	1kV	Ingles Trinidad WI
MIC150-150ING	120VAC	15A	50/60 Hz	95V-138V	5 s.	1 s	0.6 kV	Ingles

Specifications

Electrical			
Nominal Voltage	120	VAC	
Nominal frequency	50 - 60	Hz	
Steady state voltage protection			
Low cut-off voltage	95 +/- 3%	VAC	
High cut-off voltage	138 +/- 3%	VAC	
Reconnection Hysteresis	3 - 6	VAC	
Response time (voltage failure to disconnection)	1 +/- 20%	s.	
Reconnection delay cycle	5 +/- 20%	s.	
Blackout detection			
Minimum blackout duration (0% nominal voltage)	32 -64	ms	
Minimum brownout duration (50% nominal voltage)	>100	ms	
Transient voltage suppressor			
IEEE C62.41 Ubicaciones	Cat. A3		
	MIC150-150EST	MIC150-150UEM	
Allowed Maximum continuous voltage (r.m.s.)			
phase-neutral	175	300	VAC
phase-ground	175	300	VAC
Voltage protection level (clamping voltage).			
phase-neutral	0.6	1.0	kV
phase-ground	0.6	1.0	kV
Maximum peak current (1 time, 8/ 20 us)			
phase-neutral	6.5	6.5	kA
phase-ground	6.5	6.5	kA
Maximum peak current (2 times)			
phase-neutral	4	4	kA
phase-ground	4	4	kA
Energy (10/1000 us)	3 x 158	3 x 280	J
Applied standards	IEC 61000-4-5:2005 / NMX-J-610/4-5:2013 NMX-J-508 num. 6.2.8 Pass		
Maximum load			
Load			
Amperage		15	A
Power		1875	W
Mechanicals			
Dimensions			
Length	96	mm	
Width	63	mm	
Height	30	mm	
Weight	147	gr.	
Connections			
Input plug	NEMA 5-15P		
Output receptacle	NEMA 5-15R		
Applied standards (plug and receptacle)	NTC 1650 num. 10.1, 16, 17.2, 19, 21, 24, 29 NMX-J-508 6.2.3, 6.3.2, 6.3.3		
Isolation materials			
Enclosure	ABS		
Receptacle	PC		
Printed circuit board	FR4		
Clasificación retardante de llama (UL94)			
Enclosure	V0, 5VA		
Receptacle	V0		
Printed circuit board	V0		
Glow wire test (NTC 5283:2015, NMX-J-565/2-11:2005)	Enclosure 650°C pass Receptacle 850°C pass		
Ball pressure test NTC 1650 num. 25.2 y 25.3	<2		mm.
Isolation resistance NTC1650:2004 Num 17.1 NMX-J-508 num. 6.2.1	>550 >5		Mohms

Dielectric rigidity NTC1650:2004 num 17.2 NMX-J-508 num. 6.2.2	>1.25 >1.24	kV
Impact (NTC /IEC 62262:2013)	pass	
Contacts		
Material	Brass 260 (70% Cu, 30% Zn)	
Oxidation Resistance Test (NTC 1650 num 29)	It shows no traces of corrosion or oxidation.	
Enviromental		
Maximum operating ambient temperature	45	°C
Place of use: Indoor use, in a dry and ventilated place Outdoor use and/or in wet places	Yes No	

Product certificates

NOM NOM-003-SCFI Certificate No.: ANC2401C00016056 hasta 25/12/2025

Shipping packaging

Type	Capacity	Dimensions (Length x Width x Height) (cm)	Weight (Kg)
Carton CC72	72 pcs (12 x 6 pack o 2 x 36 pack)	58 x 33 x 52	14.0
Carton CC60	60 pcs (10 x 6 pack)	51 x 35 x 50	11.85
Carton CC36pack	36 pcs in blister	52 x 30 x 25	6.0
Carton CC 6 pack	6 pcs in blister	24 x 19 x 16	1.2