

# BMC 605LWR

## Bulk Molding Compound

### PRODUCT DESCRIPTION

Low cost glass fiber reinforced Polyester BMC suitable for circuit breakers, transformer bobbins and motor end bells.

### GENERAL

<b>Material Status</b>	• Commercial: Active		
<b>Availability</b>	• North America • Asia Pacific	• Europe • South America	
<b>Filler/Reinforcement</b>	• Glass Fiber and mineral filler		
<b>Features</b>	• Medium impact strength • UL Recognized—File E69414	• Excellent electrical properties • UL94-V0 @ 1.8 mm	• Improved wear resistance
<b>Processing Method</b>	• This BMC product is generally intended to be compression, injection or transfer molded in matched metal die molds, typically at 300°F (150°C) and 500 to 1,000 psi (35-65 BAR) molding pressure. Strength values may be affected by the molding process. Can be supplied as logs, slugs or bulk forms.		
<b>Resin</b>	• Unsaturated Polyester Composite		

<b>PHYSICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.88	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage (RT mold/RT part)	0.002-0.004	in/in	ASTM D955
Water Absorption, 24 hrs, 23°C	0.10	%	ASTM D570
Hardness, Barcol	15-20	Barcol Units	ASTM D2583
Poisson's Ratio	0.36		ASTM D638

<b>MECHANICAL (As molded)</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	4,000-7,000 (27-48)	psi (MPa)	ASTM D638
Flexural Strength	12,000-16,000 (82-110)	psi (MPa)	ASTM D790
Compressive Strength	17,000-20,000 (117-138)	psi (MPa)	ASTM D695

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<b>IMPACT</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Izod Notched Impact Strength	3.0-5.0 (160-267)	ft-lb/in (J/m)	ASTM D256

<b>THERMAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Heat Deflection Temperature	500+ (260+)	°F (°C)	ASTM D648
UL RTI, Electrical	266 (130)	°F (°C)	UL 746B
UL RTI, Mechanical with Impact	266 (130)	°F (°C)	UL 746B
UL RTI, Mechanical without Impact	266 (130)	°F (°C)	UL 746B

<b>FLAMMABILITY</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Flammability	Pass 0.06 (1.5)	in (mm)	UL94 V-0 NC, BK
Flammability	Pass 0.12 (3.0)	in (mm)	UL94 V-0 All

<b>ELECTRICAL</b>	<b>Typical</b>	<b>Unit</b>	<b>Test Method</b>
Dielectric Strength	300-330 (11.8-13)	Volts/mil (kV/mm)	ASTM D149
Arc Track Resistance	180+	seconds	ASTM D495
Comparative Tracking Index	600+	volts	ASTM D2303

UL File Number E69414



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