

GRADE DATA SHEET

CM3H
Industrial

<u>GENERAL DESCRIPTION AND SPHERE OF USE</u>	<u>CLASSIFICATION</u>
A Copper graphite grade well suited for slipring applications. Also used on D.C. machines up to 12v.	Copper - Graphite

PHYSICAL DATA

RESISTIVITY	0.19	μ ohm m	0.1	10-4 ohm in
TRANSVERSE BEND STRENGTH	26.5	MPa	3850.0	lbf/in ²
BULK DENSITY	4.30	g/cm ³		lb/ft ³
SHORE HARDNESS	12.0			

Physical properties may vary from time to time as modifications are made to manufacturing techniques to maintain consistent operational behaviour; as such the values stated here are intended as a guide only.

OPERATIONAL DATA

NORMAL CURRENT DENSITY RATING	Commutators	12.5	A/cm ²	A/in ²
	Rings	15.5	A/cm ²	A/in ²
NORMAL MAXIMUM OPERATING SPEED		25	m/s	ft/min
NORMAL RECOMMENDED PRESSURE		210	g/cm ²	lbf/in ²

TEST DATA

This data has been obtained in the test laboratory on a 230 mm diameter slotted copper ring (VPN 84-90) at the following test conditions:

BRUSH SECTION T * A	12.5 * 25	mm
NUMBER OF BRUSHES	4	RADIAL
BRUSH PRESSURE	210	g/cm ²
PERIPHERAL SPEED	25	m/s
CURRENT DENSITY	8.5	A/cm ²

AV. VOLT DROP PER BRUSH	0.26	V
AV. COEF. OF FRICTION	0.10	

These characteristics may vary with different machines and conditions of utilisation, and figures quoted are for guidance only.

DATE 02/03/2017

ISSUE **2**

