Congrav®
OP-M

Operator Interface for up to 6 feeders with Congrav® CB-E, CM-E, and CB-S

General Information

The Congrav® OP-M is an operating interface optimized to connected to a Congrav® CB-E, Congrav® CB-S or Congrav® CM-E controller via a serial bus link. It supports the basic functions required to operate multiple Kubota Brabender Technologie gravimetric feeders.
The Congrav® OP-M features a 7" colour touch screen which can be used to configure, control and set parameters. The versatile OP-M can operate feeders directly, monitor and adjuste process variables, and provide access to diagnostics.

The Congrav® OP-M is compatible with all Kubota Brabender Technologie devices equipped with a Congrav® CB-E, CB-S, or CM-E control module.

The unit conforms to CE directives and exceeds all electromagnetic immunity standards.

Interfaces

Interfaces to Congrav® CM-E, CB-E or CB-S (RS 485)	max. cable lenght 300 m
Host-/SPS-Interface	Communication with customer-side system via Ethernet Modbus TCP Optional: Profibus DP with external module

Technical Specification

Rated voltage	DC 24V (19 - 36V)
Residual ripple, spikes	< 200mVss; < 300mVss
Rated output	typ. 8 VA
Rated current	max. 320 mA
Ambient temperature	0°C – 50°C (32°F to +122°F)
Storage Temperature	-10°C – 80°C
Humidity of the air	Up to 85% without condensation
Touch-screen LCD colour display	7“(152,4 x 91,4 mm) with LED backlight
Touchscreen Type	Capacitive (multi-touch)
Resolution	800 x 480 (WVGA)
Angle of view	20° - 160° (all directions)
Housing material	Stainless steel, powder-coated
Front framing	Aluminium
Mounting depth	40 mm
Panel cutout	194 x 133 mm
Weight	Ca. 1,05 kg
Enclosure rating - Front	IP65 (ca. NEMA 4)
Enclosure rating - Housing	IP20 (ca. NEMA 1)
Type of menu	Symbol-based menu with virtual keys

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Electromagnetic compatibility (EMC)	
Requirement	**Standard**
Interference immunity	
ESD	EN 61000-4-2:2009
HF radiation	EN IEC 61000-4-3:2020
Burst	EN 61000-4-4:2012
Surge	EN 61000-4-5:2014 + A1
Inflow	EN 61000-4-6:2014
H-field irradiation	EN 61000-4-8:2010
Emission	
Interference voltage	EN 55011:2016 + A1, A11, A2
HF field radiation	EN 55011:2016 + A1, A11, A2

Additional Information

- Dimension template (for installation in control cabinet)

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