



Congrav® OP1-S

Operator Interface for a single feeder system with Congrav® CB-E or CM-E Controller



General Information

The Congrav® OP1-S is an operator interface that is connected to a [Congrav® CB-E](#) or [Congrav® CM-E](#) controller via a serial bus link. It provides the basic functions that are required for the operation of a single Brabender gravimetric feeder.

The [Congrav® OP1-S](#) features a 5.7" colour touch screen which can be used to configure, control and set parameters. The versatile OP1-S can operate the feeder or be used to monitor/set process variables and access diagnostics.

The Congrav® OP1-S is compatible with all Brabender Technologie devices equipped with a Congrav® CB-E or CM-E control module.

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



Interfaces

Interface to Congrav® CM-E or CB-E (RS 485)

The interface to Congrav OP1-S from the control module will also provide the 24 VDC power supply for distances less than 20 m. For cable lengths greater than 20m a separate power supply is required.

Technical Specification

| Technical Specification | |
|---------------------------------|--|
| Rated voltage | DC 24V (20 - 36V) by via the control module CB-E or CM-E. No separate power supply required. |
| Residual ripple, spikes | < 200mVss; < 300mVss |
| Rated output | Typ. 12 VA |
| Rated current | 500 mA |
| Ambient temperature | 0°C to +50°C (32°F to +122°F) |
| Humidity of the air | Up to 85% without condensation |
| Touch-screen LCD colour display | 5.7" / 144 x 105 mm with LED backlight |
| Resolution | 320 x 240 (QVGA) |
| Housing material | Stainless steel |
| Front framing | Aluminium |
| Mounting depth | 100 mm (3.9 in) with angled plug connections |
| Panel cutout | 160 x 135 mm (6.2 x 5.3 in) |
| Weight | Ca. 0.8 kg (1.7 lb) |
| Enclosure rating – Enclosure | IP65 (panel mount) |
| Enclosure rating - | IP65 |
| Type of menu | Symbol-based menu with virtual keys |

Electromagnetic compatibility (EMC)

| Requirement | Standard |
|----------------------|-----------------------------|
| ESD | EN 61000-4-2 (2001) |
| HF radiation | EN 61000-4-3 (2006+A1) |
| Burst | EN 61000-4-4 (2005) |
| Surge | EN 61000-4-5 (2007) |
| Inflow | EN 61000-4-6 (2007) |
| Interference voltage | CISPR 16 / EN 55011 Class A |