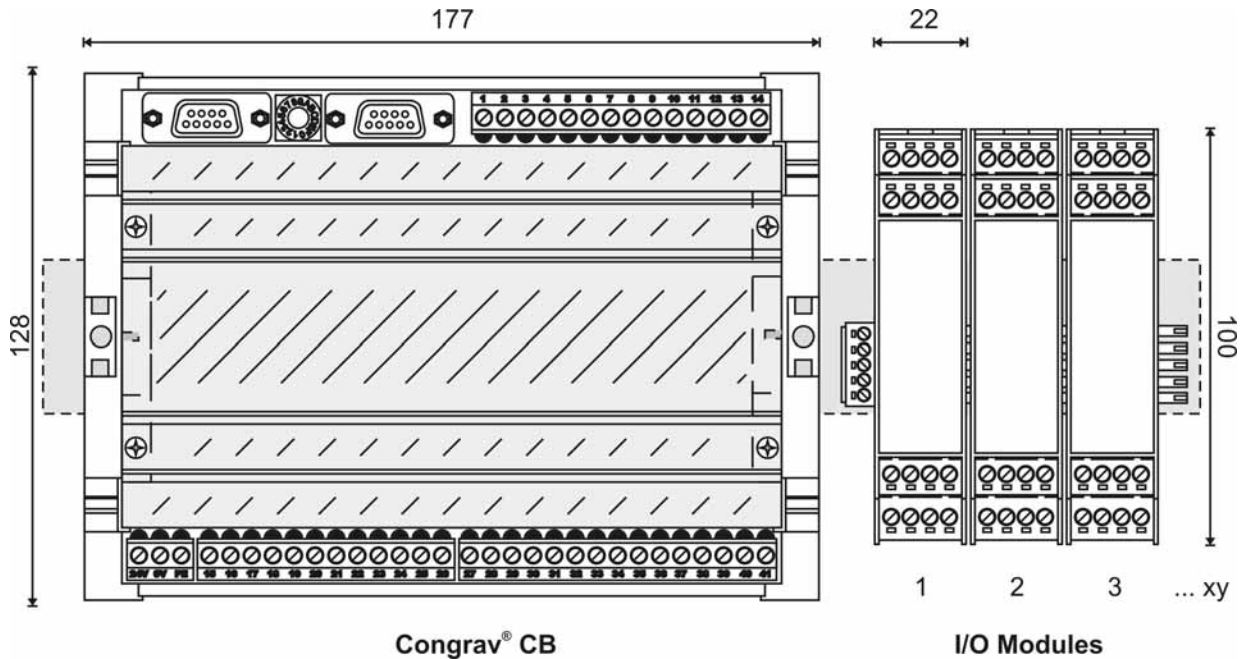
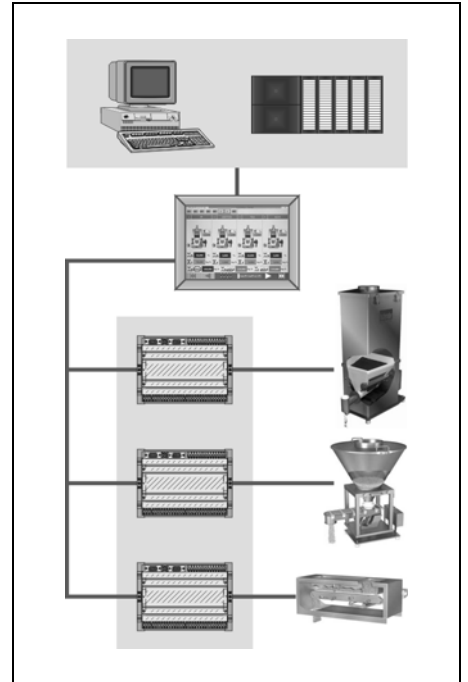


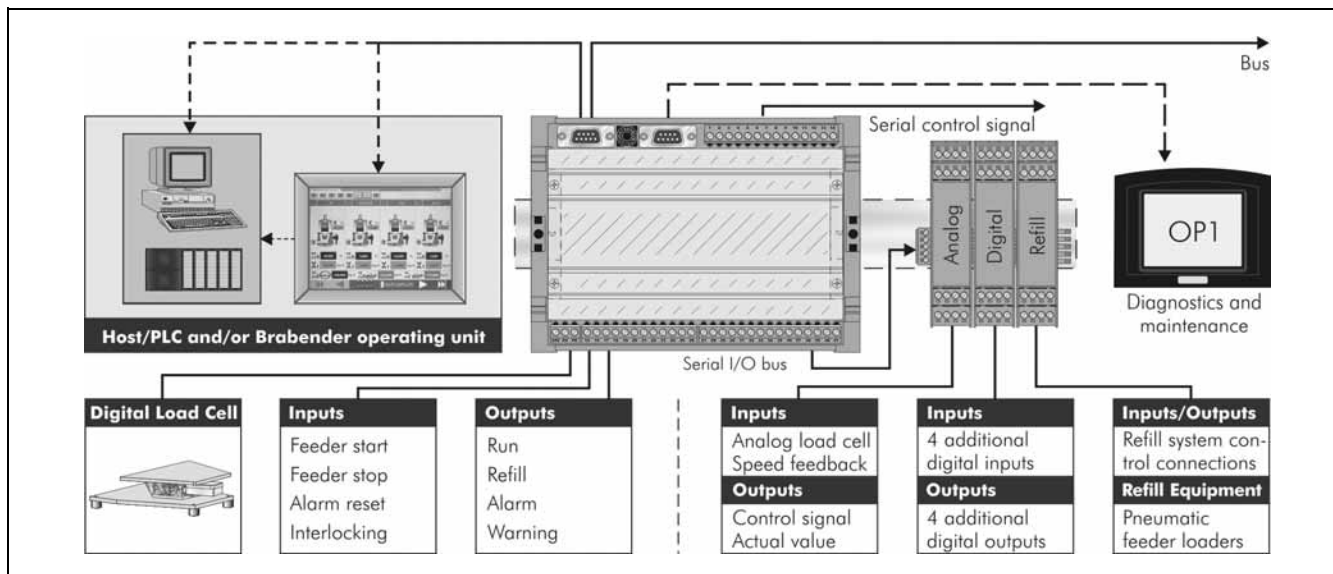
Brabender Controller Congrav® CB for Multiple Feeder Control Systems

Brabender Congrav® CB controllers for control cabinet installation by means of top hat rails are intelligent single feeder control modules for gravimetric metering feeders with three-phase current motors (loss-in-weight feeders, weigh-belt feeders, etc.), serving to integrate the same in multiple feeder control systems connected to the Brabender touch screen operating unit Congrav® OP 5 or Congrav® OP 12 and/or to a customer's automation system (host/PLC). For that purpose the feeders in the system are connected to one controller each, while all of the controllers are interconnected through bus interfaces and commonly connected to the according operating unit. For direct connection to PLC systems, loadable function blocks (software) are available to ensure dependable feeder performance

Each Congrav® CB is equipped with a diagnostics and maintenance interface allowing to connect either a PC, laptop or the Brabender parameter upload unit Congrav® OP 1. The basic version of the Congrav® CB can be extended by a variety of options including - for instance - digital and analog extension modules (I/O modules) with additional digital and analog inputs and outputs. Further optional extension modules allow to control pneumatic feeder loaders. Extension modules are connected to the Congrav® CB by a serial bus (Brabender I/O Bus). The unit conforms to CE directives and is distinguished by its high electromagnetic compatibility.



Technical Data*



Application

- Control of individual metering feeders in multiple feeder control systems

Design

- Housing for top hat rail mounting
- Weight approx. 0.6 kg
- Enclosure protection IP 20
- Supply voltage 24 VDC
- Power consumption approx. 5 VA without ext. connections (with up to 20 VA)
- Operating temperature 0 - 45°C
- Max. 85% air humidity (no condensation)
- Climatic class KWF as per DIN 40040

Interfaces

- 1 x RS 422 (Siemens RK 512) for bus interconnection of Congrav® CB units resp. their connection to operating units Congrav® OP12 / OP5 Touch (see the according Works Standards) or to customer's PLC/host system
- 1 x RS 422 diagnostics and maintenance interface

- 1 x RS 485 for I/O bus when using I/O modules (see options)
- 1 x RS 422 for digital load cell
- 1 x RS 485 for frequency converter

Inputs

- 4 potentially isolated digital inputs for external operation: start, stop, alarm reset, interlocking
- Logics: positive
 Rated voltage: 24 VDC
 Input current: approx.. 7 mA
 One of them usable as speed input for digital speed feedback:
- Input voltage: 24 VDC
 Input current: 10 mA
 Frequency range: 0-10 KHz

Outputs

- 4 potentially isolated digital outputs for system control and status messages: run, alarm, refill (auto-tare for weigh-belt feeders), warning
- Output type: relay
 Rated voltage: 24 VDC
 Rated data: 30 VDC / 5 A

Noise Immunity

EN 55011 (emission class A, interference voltage AC, interference field); EN 61000-6-2 (interference immunity); EN 61000-4-2 (ESD); EN 61000-4-3 (radiation); EN 61000-4-4 (burst); EN 61000-4-5 (surge); EN 61000-4-6 (conducted immunity)

Options / Accessories

I/O modules for top hat rail mounting (communications: Brabender I/O Bus):

- Digital extension module: 4 digital inputs (e. g. start, stop, alarm reset, etc.), 4 digital outputs (e. g. run, alarm, etc.)
- Analog extension module: 2 analog inputs 0(2)-10 V (e. g. analog control signal), 2 analog outputs 0(4)-20 mA (e. g. actual value, control signal)
- Extension module to control pneumatic feeder refill loaders
- Alternative PLC/host interfaces: Profibus DP, Data Highway plus, Modbus RTU (others on request)



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 Supersedes none