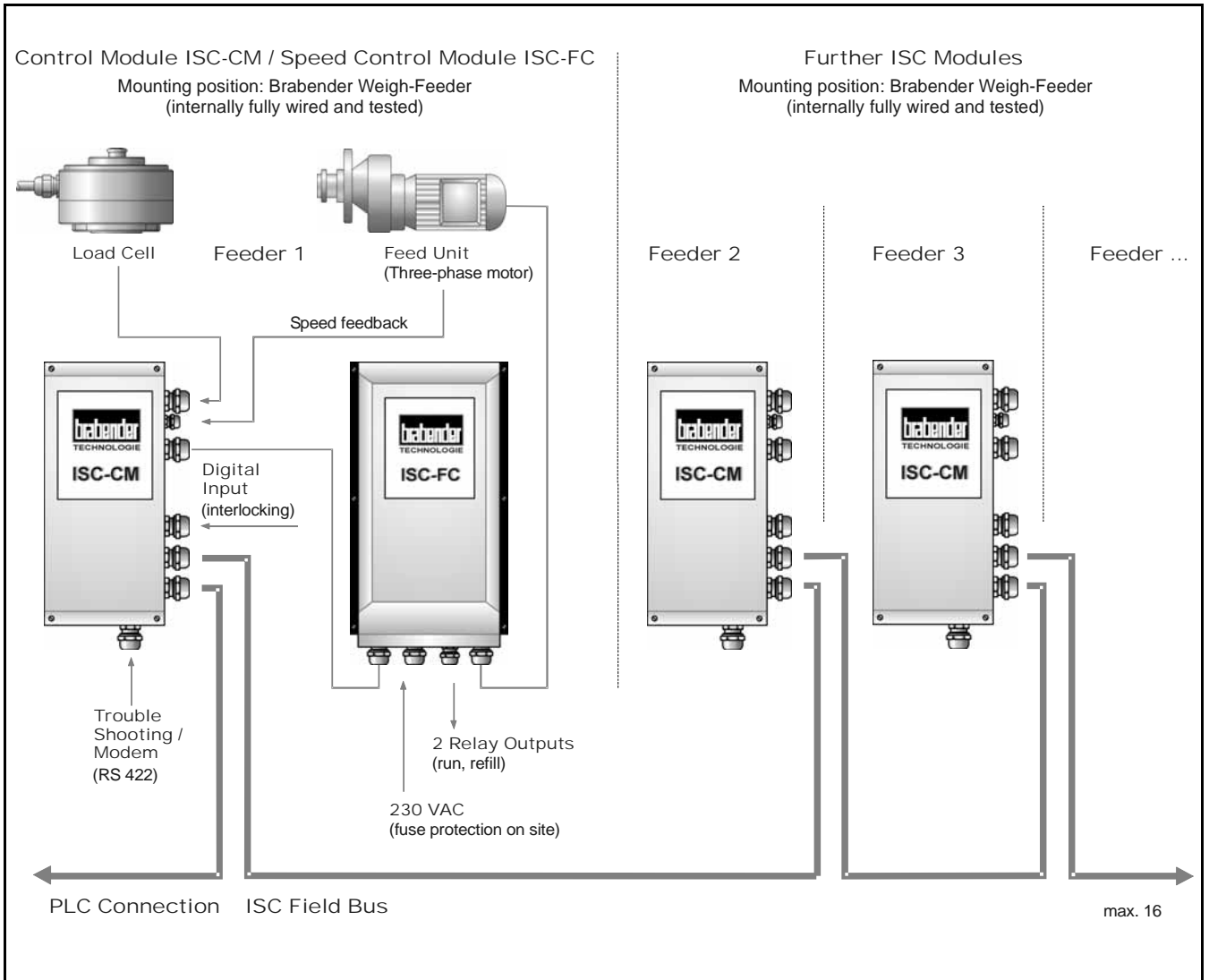
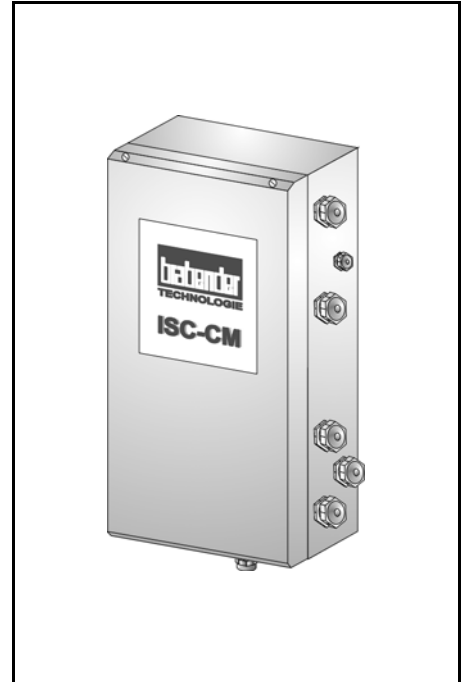


## Brabender ISC Modules Type ISC-CM/ISC-FC for Brabender SCC Field Bus System

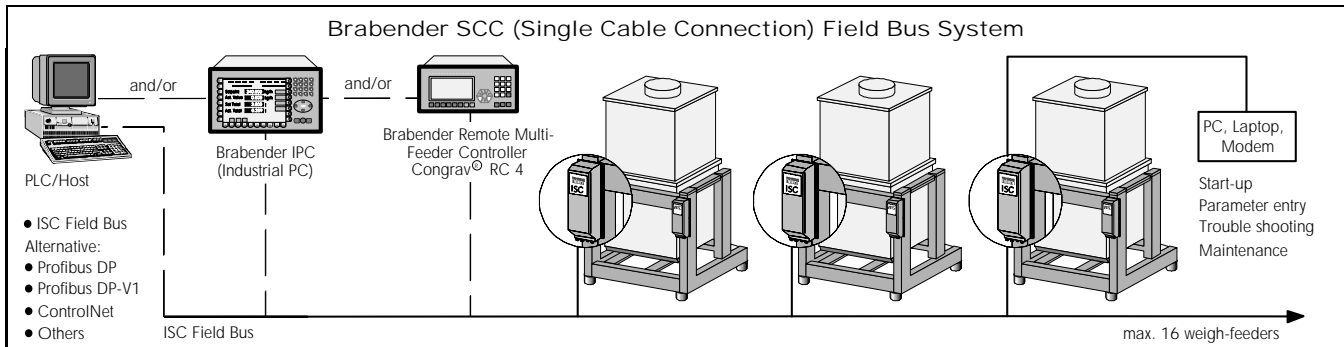
The Brabender ISC (Intelligent Signal Conditioner) modules ISC-CM (control module) and ISC-FC (speed control module) are feeder-mounted intelligent electronic modules fully wired to the weigh-feeder and serve for integration of gravimetric metering feeders with three-phase current motors in the Brabender SCC (Single Cable Connection) Field Bus System. Up to 16 weigh-feeders in field bus interconnection can be interfaced with customers' host/PLC systems and/or the Brabender Remote Multi-Feeder Controller Congrav® RC 4 and/or the Brabender IPC (Industrial PC) by just one single cable. For that purpose weigh-feeders are interconnected by a field bus via the ISC-CM modules (Brabender ISC Field Bus) and connected with the respective operating units.

Each ISC-CM module is equipped with a service interface to connect a PC, laptop or modem for system diagnosis and trouble shooting. The speed controllers of the weigh-feeders are integrated in the ISC-FC modules. Compared with conventional technology, the integration of the metering, control and regulation electronics in the weigh-feeders themselves saves all control cabinets otherwise required and reduces cabling and installation expenses to a minimum. Additional weigh-feeders can easily be integrated in the system by connecting them to the field bus.

As alternatives to the Brabender ISC Field Bus, further bus systems are available such as Profibus DP, Profibus DP-V1, ControlNet and others upon request.



## Technical Data\*



### Design

- System: Brabender ISC (Intelligent Signal Conditioner) modules type ISC-CM (control module) and ISC-FC (speed control module with frequency converter for three-phase current motors)
- Closed housings, mounted on the weigh-feeder, internally wired and workshop-tested
- Ambience: 0-45°C, max. 85 % air humidity without condensation
- Noise immunity: The modules comply with the following directives and harmonized specifications of the European Union: 89/336/EEC (electromagnetic compatibility), 73/23/EEC (low voltage), EN 60204-1: 1992, EN 50081-2: 1993, EN 50082-2: 1994
- The modules comply with CE directives

### Control Module ISC-CM

- Enclosure protection: IP 65
- Power supply from ISC-FC module

### Interfaces/Inputs:

- ISC Field Bus: RS 485
- Alternative field bus systems: Profibus DP, Profibus DP-V1, ControlNet, others on request
- RS 422 interface for Intelligent Digital Load Cell IDL-F or analog load cell with Brabender converter module

- RS 422 individual feeder diagnosis and parameter entry interface for PC or laptop connection for start-up and service, or for modem for remote trouble shooting
- 1 digital input (interlocking 24 VDC)
- Frequency input for digital speed feedback (input voltage 24 VDC, frequency range 0-10 kHz)

### Outputs:

- RS 485 interface to speed control module ISC-FC (signal transmission to the speed controller of the weigh-feeder)

### Speed Control Module ISC-FC

- Enclosure protection: IP 55
- Built-in speed controller (frequency converter) for speed control of gravimetric feeders with three-phase current motors)

### Interfaces/Inputs:

- Mains: 185-260 V ± 0 %, 47-63 Hz
- RS 485 interface for control signal from the ISC-CM control module to the built-in speed controller

### Outputs:

- 2 relay outputs (enable, refill), additional digital and analog outputs available as options for Congrav<sup>®</sup> RC 4 operating unit
- Feed unit connection (3-phase motor)

### Accessories

#### Operating and Display Units:

- Brabender Remote Multi-Feeder Controller Congrav<sup>®</sup> RC 4 (see Works Standard "Congrav<sup>®</sup> RC 4")



- Brabender IPC (Industrial PC) with Provis process visualization (see Brabender Works Standard "Brabender IPC")



#### Further Accessories:

- PC diagnosis software SmartService<sup>®</sup>
- Plug-in Brabender local parameter entry unit for individual connection to ISC-CM control modules

# brabender

## TECHNOLOGIE

An ISO 9001/EN 29001 Certified Company

\*Modifications reserved. All data describe our products in a general manner. They are no agreement on or warranty of characteristics in the sense of § 434 or guarantee in the sense of § 443 of the German Civil Code or similar regulations and effect no liability.

Issue 2.0 (February 08)  
Supersedes 3.0 (March 00)