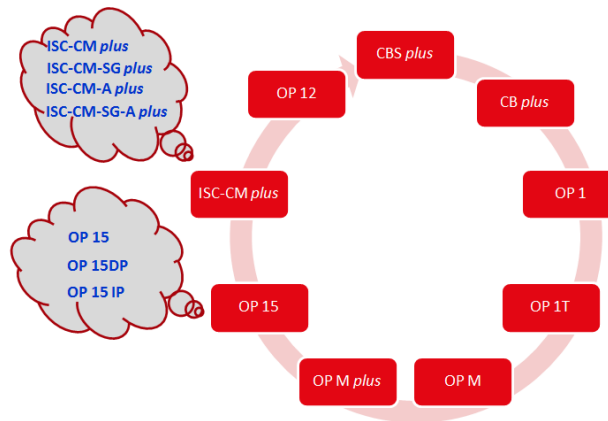




Introduction of the controller - nomenclature

The range of controllers and control variants has become highly complex.



In order to indicate a manageable differentiation between standard controllers and enhanced controllers, a uniform nomenclature will be introduced.

What is a nomenclature?

The nomenclature is a list of defined designations and names in a certain range, product group.

Why a nomenclature?

Defined designations offer the advantage that they are valid for everyone unlike freely created designations. Thus they permit to serve as a communication basis inside and outside the company.

The notion Congrav®

Brabender Technologie controllers are referred to as product family Congrav®. The designation **Congrav®** is a registered trademark.

The naming

The controller names have been chosen so that the designation of the controllers indicates the individual associated control, thus making the designation more understandable for new customers.



Differentiation

Each controller is designated by **"E"** or **"S"**.

E = enhanced	S = standard
<p style="text-align: center;">=</p> <ul style="list-style-type: none"> - host computer interfaces available - connection of external input and output modules - special executions 	<p style="text-align: center;">=</p> <ul style="list-style-type: none"> - no host computer interfaces available - connection of external input and output modules is not possible.

The version numbers

1.0	<p>The first number is changed for a <u>new device variant</u>.</p> <p>The second number is changed for a <u>minor revision of the hardware or of the software</u>*.</p>
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* such as Congrav 12 R1 – R5



Designations

Operating panels

The operating panels will be named in future on the basis of the components to be connected. In addition, a version number will be attached to each designation.

OP1-S	Connection of	1 component
OP6-E	Connection of	6 components
OP16-E	Connection of	16 components

New designation: The operating panels are designated under the mentioned abbreviation in all sales documents, catalogues and brochures.

Name plate / code: The operating panels are designated on the name plate and as a code in the sales documents and the shipping documents with the listed abbreviation.

Name on front plate: The operating panels are identified on the front by the label Congrav® OP and the Brabender company logo



Designations

Controllers

The new naming also provides information on the installation type of the controller.

Congrav® CB-E (**C**ontrol **B**oard) designates controllers for the control cabinet installation.

Congrav® CM-E (**C**ontrol **M**odule) designates controllers that are mounted to the machine.

Frequency converters

FC CB (**F**requency **C**onverter for **C**ontrol **B**oard), integrated in the control cabinet.

FC CM (**F**requency **C**onverter for **C**ontrol **M**odule), mounted to the machine.

Vibration amplitude controller

VC CB (**V**ibration **C**ontroller for **C**ontrol **B**oard), integrated in the control cabinet.

VC CM (**V**ibration **C**ontroller for **C**ontrol **M**odule), mounted to the machine.

Digital I/O units

DU OP (**D**igital **U**nit for **O**perating **P**anel) currently only available for Congrav®OP16-E and Congrav®OP16-E-PB

DU CB (**D**igital **U**nit for **C**ontrol **B**oard) currently only available for Congrav®CB-E

Analog I/O units

AU OP (**A**nalog **U**nit for **O**perating **P**anel) currently only available for Congrav®OP16-E and Congrav®OP16-E-PB

AU CB (**A**nalog **U**nit for **C**ontrol **B**oard) currently only available for Congrav®CB-E




Nomenclature since Q4 - 2017


The nomenclature of the controllers and operating panels





Nomenclature 2018


The new names of the operating panels reflect the number of feeders that can be connected.

	Operating Panel		
		No. of feeders	1
	OP 1T	New name	Congrav® OP1-S
		Name plate/code	Congrav® OP1-S 1.0
	Name on front plate	Congrav® OP	

	Operating Panel		
		No. of feeders	6
	OP M plus	New name	Congrav® OP6-E
		Name plate/code	Congrav® OP6-E 1.0
	Name on front plate	Congrav® OP	

	Operating Panel		
		No. of feeders	16
	OP 15	New name	Congrav® OP16-E
		Name plate/code	Congrav® OP16-E 1.0
	Name on front plate	Congrav® OP	

	Operating Panel		
		No. of feeders	16
	OP 15DP	New name	Congrav® OP16-E
		Name plate/code	Congrav® OP16-PB-E 1.0
	Name on front plate	Congrav® OP	


	Remote Control		
		No. of feeders	16
		New name	Congrav® OP16-RC-S
		Name plate/code	Congrav® OP16-RC-S 1.0
	Name on front plate	Congrav® OP	



Nomenclature 2018


Explanation:

Congrav® OP1-S 1.0	Congrav® OP6-E 1.0	Congrav® OP16-E 1.0	Congrav® OP16-PB-E 1.0
Operating Panel	Operating Panel	Operating Panel	Operating Panel
1 = no. of feeders	6 = no. of feeders	16 = no. of feeders	16 = no. of feeders
			Profibus
Standard	Enhanced	Enhanced	Enhanced
Version 1.0	Version 1.0	Version 1.0	Version 1.0

	Digital I/O Unit		
		New name	DU OP
		Name plate/code	DU OP 1.0

Explanation:

DU OP = Digital Unit to be connected to an OP (currently only available for OP16 and OP16-PB)


	Analog I/O Unit		
		New name	AU OP
		Name plate/code	AU OP 1.0

Explanation:


AU OP = Analog Unit to be connected to an OP (currently only available for OP16 and OP16-PB)




Nomenclature 2018

	Control board (control cabinet mounted)		
		No. of feeders	1
	CB plus	New name	Congrav® CB-E
		Name plate/code	Congrav® CB-E 2.0

CB-E = Control Board - Enhanced


	Control board (control cabinet mounted)		
		No. of feeders	1
	CBS	New name	Congrav® CB-S
		Name plate/code	Congrav® CB-S 1.0


CB-S = Control Board - Standard

	Digital I/O Unit		
		New name	DU CB
	Digital Module	Name plate/code	DU CB 1.0

DU CB = Digital Unit to be connected to a **CB** (currently only available for CB-E)

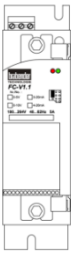
	Analog I/O Unit		
		New name	AU CB
	Analog Module	Name plate/code	AU CB 1.0



			
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AU CB = Analog Unit to be connected to a **CB** (currently only available for CB-E)

Nomenclature 2018

	Frequency converter (control cabinet mounted)		
		New name	FC CB
	FC-Vx.x	Name plate/code	FC CB (0.37 /1) 1.0 FC CB (0.75 /1) 1.0 FC CB (1.5 /1) 1.0

FC CB = Frequency Converter for Congrav® CB


FC CB (0.37 /1) 1.0


	Vibration amplitude controller (control cabinet mounted)		
	DRS 4	New name	VC CB
		Name plate/code	VC CB 1.0
		Name on front	VC CB





VC CB = Vibration Controller for Congrav® CB

Nomenclature 2018

	Control module (feeder mounted)		
	ISC-CM plus	New name	Congrav® CM-E
		Name plate/code	Congrav® CM-E 1.0
		Name on front	Congrav® CM

	Control module (feeder mounted)		
	ISC-CM-SG plus	New name	Congrav® CM-SG-E
		Name plate/code	Congrav® CM-SG-E 1.0
		Name on front	Congrav® CM


	Control module (feeder mounted)		
	ISC-CM-A plus	New name	Congrav® CM-A-E
		Name plate/code	Congrav® CM-A-E 1.0
		Name on front	Congrav® CM

	Control module (feeder mounted)		
	ISC-CM-SG-A plus	New name	Congrav® CM-SGA-E
		Name plate/code	Congrav® CM-SGA-E 1.0
		Name on front	Congrav® CM




Congrav® CM-E 1.0	Congrav® CM-SG-E 1.0	Congrav® CM-A-E 1.0	Congrav® CM-SGA-E 1.0
Control Module	Control Module	Control Module	Control Module
	Strain Gauge	Analog I/O board	Strain Gauge/ Analog I/O board
Enhanced	Enhanced	Enhanced	Enhanced
Version 1.0	Version 1.0	Version 1.0	Version 1.0

Nomenclature 2018

	Frequency converter module (feeder mounted)		
		New name	FC CM
	ISC-FC plus	Name plate/code	FC CM (0.37 /1) 1.0 FC CM (0.75 /1) 1.0 FC CM (1.5 /1) 1.0
	Name on front	FC CM	

FC CM = Frequency Converter for Congrav® CM

	Vibration amplitude controller module (feeder mounted)		
		New name	VC CM
	ISC-VC	Name plate/code	VC CM 1.0
	Name on front	VC CM	

VC CM = Vibration Amplitude Controller for Congrav® CM