

WWW.SCHMALZ.COM

Note

This document were originally written in German and have been translated into English.
Store in a safe place for future reference.

Subject to technical changes without notice. No responsibility is taken for printing or other types of errors.

Published by

© J. Schmalz GmbH, 01.2020

This document is protected by copyright. J. Schmalz GmbH retains the rights established thereby. Reproduction of the contents, in full or in part, is only permitted within the limits of the legal provisions of copyright law. Any modifications to or abridgments of the document are prohibited without explicit written agreement from J. Schmalz GmbH.

Contact

J. Schmalz GmbH
Johannes-Schmalz-Str. 1
72293 Glatten, Germany

Tel. +49 (0) 7443 2403-0
Fax +49 (0) 7443 2403-259
schmalz@schmalz.de
www.schmalz.com

Contact information for Schmalz companies and trade partners worldwide can be found at

 www.schmalz.com/salesnetwork

Table of contents

1	Function block “FB_ECBPi”	4
1.1	Brief description	4
1.2	Image of function block.....	4
1.3	Parameter - Input.....	5
1.4	Parameter - Output.....	6
2	Appendix	7
2.1	List of abbreviations	7
2.2	Note.....	7

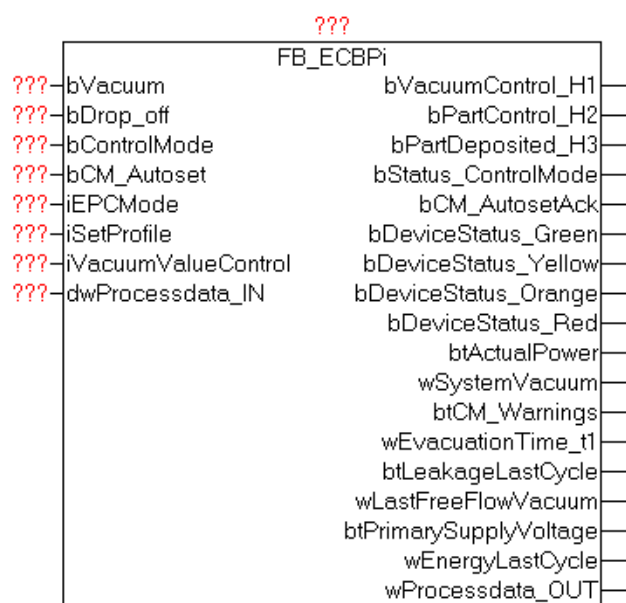
1 Function block "FB_ECBPi"

1.1 Brief description

This function block controls the Processdata of Schmalz ECBPi with IO-Link.

1.2 Image of function block

Example of function block:



1.3 Parameter - Input

name	data type	description
bVacuum	BOOL	Request for suction
bDrop_off	BOOL	Request to drop-off
bControlMode	BOOL	Control Mode (see: iVacuumValueControl)
bCM_Autoset	BOOL	Automatic determination and storage in the active profile of max. leakage rate (-L-) and evacuation time (t-1) of last cycle
iEPCMode	INT	Request for EPC data can be controlled as following: 0 = no request 1 = request for values of EPC-Select 0 2 = request for values of EPC-Select 1 3 = request for values of EPC-Select 2 4 = request for values of EPC-Select 3 5 = values are automatically picked up
iSetProfile	INT	Choice of desired vacuum profile (0 – 3)
iVacuumValueControl	INT	bControlMode = 0 : setting setpoint value bControlMode = 1 : engine speed control
dwProcessdata_IN	DWORD	Input doubling word of process data

1.4 Parameter - Output

name	data type	description
bVacuumControl_H1	BOOL	Vacuum value within setpoint area (only in setpoint mode)
bPartControl_H2	BOOL	Switch-on value signal output „Part control“
bPartDeposited_H3	BOOL	Part deposited
bStatus_ControlMode	BOOL	Status of control function
bCM_AutosetAck	BOOL	Active when CM Autostart completes successfully
bDeviceStatus_Green	BOOL	Device is working optimally
bDeviceStatus_Yellow	BOOL	Device is working but there are warnings
bDeviceStatus_Orange	BOOL	Device is working but there are severe warnings
bDeviceStatus_Red	BOOL	Device is not working properly
btActualPower	BYTE	Actual Power (%)
wSystemVacuum	WORD	System vacuum (mBar)
btCM_Warnings	BYTE	CM Warnings
wEvacuationTime_t1	WORD	Evacuation time t1 (ms)
btLeakageLastCycle	BYTE	Leakage of last handling cycle (mbar/s)
wLastFreeFlowVacuum	WORD	Last free flow vacuum (mbar)
btPrimarySupplyVoltage	BYTE	Input voltage (V)
wEnergyLastCycle	WORD	Energy consumption of last handling cycle (Ws)
wProcessdata_OUT	WORD	Output word of process data

2 Appendix

2.1 List of abbreviations

abbreviation	description
FB	Function block
EPC	Energy- and Processcontrol
CM	Condition Monitoring
EM	Energy Monitoring
PM	Predictive Maintenance

2.2 Note

- The byte order of the product is represented as big endian.
- The triggering of the vacuum must be carried out in accordance with the corresponding ejector variant (e.g., NO, NC, IMP).

At your service worldwide



● **Headquarters**
Hauptsitz

Schmalz Germany – Glatten

● **Sales and production companies**
Vertriebs- und Produktionsgesellschaften

Schmalz China – Shanghai
Schmalz India – Pune
Schmalz Japan – Yokohama
Schmalz USA – Raleigh (NC)

● **Sales companies**
Vertriebsgesellschaften

Schmalz Australia – Melbourne
Schmalz Benelux – Hengelo (NL)
Schmalz Canada – Mississauga
Schmalz Finland – Vantaa
Schmalz France – Champs-sur-Marne
Schmalz Italia – Novara
Schmalz Mexiko – Querétaro

Schmalz Poland – Suchy Las (Poznan)
Schmalz Russia – Moskow
Schmalz South Korea – Anyang
Schmalz Spain – Erandio (Vizcaya)
Schmalz Switzerland – Nürensdorf
Schmalz Turkey – Istanbul

• **Sales partners**
Vertriebspartner

You can find the Schmalz sales partner in your country at:
WWW.SCHMALZ.COM/SALESNETWORK

Den Schmalz Vertriebspartner in Ihrem Land finden Sie auf:
WWW.SCHMALZ.COM/VERTRIEBSNETZ

J. Schmalz GmbH
Johannes-Schmalz-Str. 1
72293 Glatten, Germany
T: +49 7443 2403-0
schmalz@schmalz.de
WWW.SCHMALZ.COM

Version 01 | 01.2020