

# ROTARY INDEXING TABLE CONTROLLER EF3 TECHNICAL DATA



INSPIRING PEOPLE  
GREAT SOLUTIONS

WEISS developed the EF3 control system especially for fixed-cycle rotary indexing tables and rotary indexing rings. It is an all-in-one solution: after all, the control system and motor controller are installed in one housing. This saves space in the control cabinet. With the keypad, users and start-up engineers get precise feedback on current states and possible errors. The information is output in full text to ensure quick transparency. This simplifies the diagnostics and parameterization options. The EF3 keypad also displays the next signals to be actuated, which makes start-up easier (foresighted action).

A defined handshake between EF3 and the higher-level machine control system via digital I/O signals avoids control errors. Alongside the 24 V DC Digital I/O interface, EF3 is now available with EtherCAT and, as of 2025, with Profinet.

Since WEISS provides different grid standards with EF3, it can be used worldwide. An integrated energy-saving mode enables efficient operation. In addition, the rotary indexing table control system can be updated, which extends its reliable period of use over many years.

## For MORE productivity

- Optimized movement profiles for the rotary indexing table thanks to proprietary WEISS algorithms
- Optimized, shorter cycle times
- Friendly to the mechanical system

## For MORE efficiency

- Predictive information reduces long downtimes
- Foresighted action
- Engineered for worldwide use

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## Trademarks

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For more details on EF3 please visit [weiss-world.com](http://weiss-world.com)

**Subject to technical modifications  
and other changes.**

## Downloads

WEISS CAD Download Portal



# ROTARY INDEXING TABLE CONTROLLER EF3

## TECHNICAL SPECIFICATIONS

### SPECIFICATIONS

<b>Cycle rate <sup>1</sup></b>	Suitable for more than 2 m cycles per year
<b>Platform</b>	Rotary Indexing Table Controller
<b>Performance class</b>	0,75 kW – 4 kW
<b>Communication interface</b>	– EtherCAT – PROFINET (in announcement for 2025) – 24 V DC Digital I/O
<b>Safety feature</b>	STO SIL3
<b>Operation</b>	Web HMI, Display/Keypad
<b>Languages</b>	German, English
<b>Diagnostic option</b>	Alarm list, logbook, I/O monitor
<b>Parameter backup and recovery</b>	Yes
<b>Update capable</b>	Yes
<b>Front panel installation</b>	Yes
<b>Availability</b>	100 %
<b>Upgrade capability</b>	Plug-in card for communication interface

### CONNECTION DATA

<b>Rated voltage</b>	200-480 V / 50-60 Hz
<b>Rated power</b>	0,75 kW – 4 kW
<b>Digital Inputs</b>	9
<b>Digital Outputs</b>	6
<b>Connection for motor brake</b>	Yes
<b>Motor temperature monitoring</b>	Yes

### OPERATING MODES

<b>Auto</b>	Automatic mode, actuated by external control signals
<b>Hand</b>	Hand mode, operated by Web HMI or Display/Keypad
<b>Jog</b>	Jog mode, operated by Web HMI or Display/Keypad
<b>Demo</b>	Demo mode, operated by Web HMI or Display/Keypad

### PHYSICAL DATA

<b>Dimensions</b> <small>W x H x D</small>	59,5 mm × 324,9 mm × 208,3 mm (90 mm × 343,7 mm × 268,3 mm with brake resistor)
<b>Mounting</b>	Screwed
<b>Protection class</b>	IP20
<b>Ambient temperature</b> <small>min. – max.</small>	-10° C – 55° C
<b>Weight</b>	≈ 1,6 kg

### MARKET APPROVALS

<b>Conformity, approval</b>	– CE (European Union) – EAC (Eurasian Conformity) – UKCA (United Kingdom) – UL (USA and Canada)
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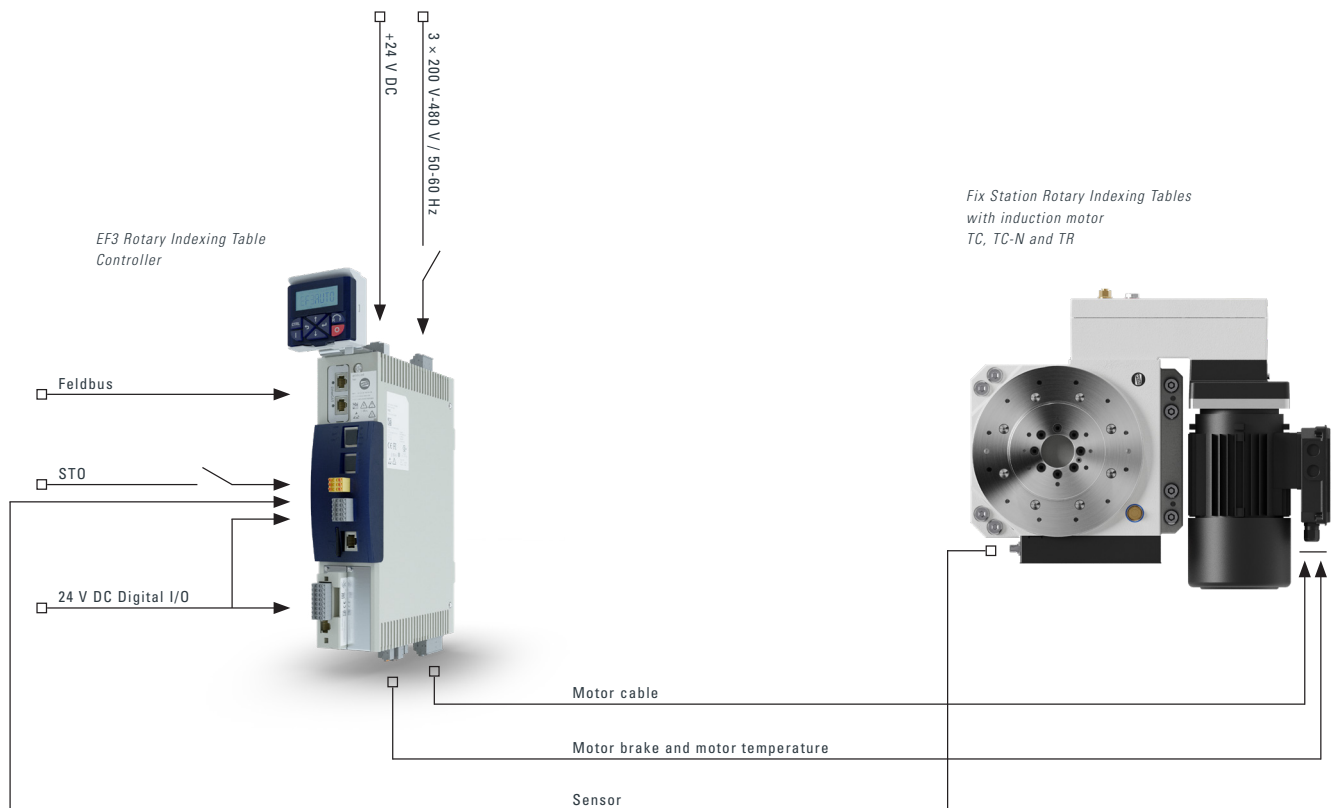
The specified technical data may vary depending on the application.



You can find more about the details of your EF3 here:  
[weiss-world.com/EF3](https://weiss-world.com/EF3)

# ROTARY INDEXING TABLE CONTROLLER EF3 BLOCK DIAGRAM

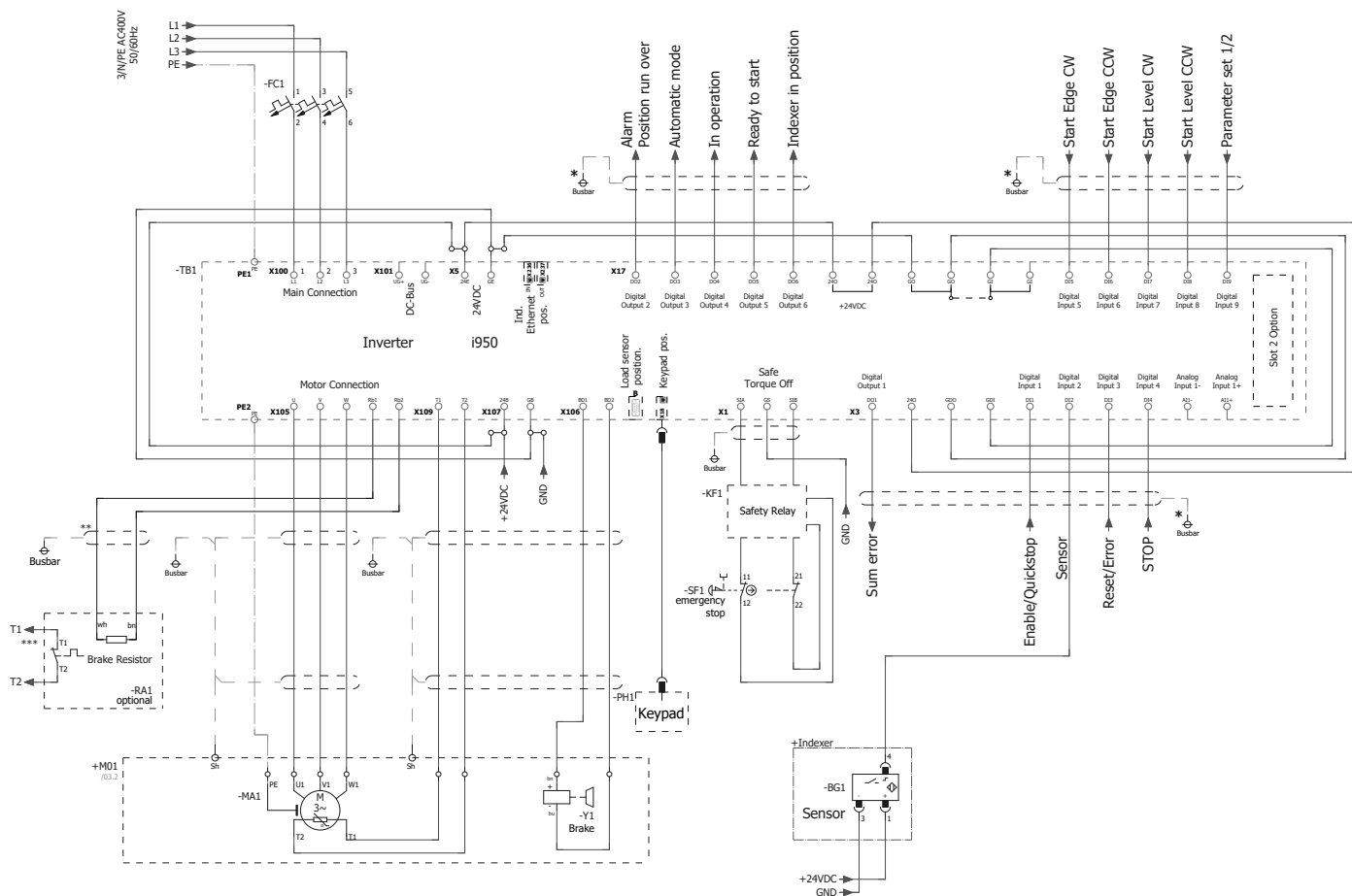
## Electrical connection



# ROTARY INDEXING TABLE CONTROLLER EF3

## SAMPLE CIRCUIT

Sample circuit 0,55 kW / 2,2 kW / 4,0 kW



- \* With cable length > 5 m shielding required.
- \*\* Not necessary when using WEISS brake resistor.
- \*\*\* Optional connection of thermal contact to customer PLC. Note: Braking resistor is intrinsically safe.

Warnings: With the „safe torque off“ (STO) function, no „emergency-stop“ can be executed after EN 60204–1 without additional measures. There is no electrical isolation between the motor and inverter, no service switch or maintenance switch! Possible consequences: Death or severe injuries. „emergency-stop“ requires electrical isolation, e. g. via a central mains contactor. Automatic restart if the request of the safety function is deactivated. Possible consequences: Death or severe injuries. You must provide external measures according to EN ISO 13849–1 which ensure that the drive only restarts after a confirmation

Protection: I95AE175F1AV1AY007 EF3055 1-phase B10A, I95AE222F1AV1AY007 EF3220 1-phase B16A, I95AE175F1AV1AY006 EF3075 3-phase B10A, I95AE222F1AV1AY006 EF3220 3-phase B16A, I95AE240F1AV1AY006 EF3400 3-phase B16A