

Active Energy Management Device for Electric Drive Technology



Specially designed with UPS functionality in a closed housing (IP20)





Technical data PxTTX



Version August 25, 2024

| Criteria | РхтТХ |
|--|--|
| Weight | 6.0 kg (stand-alone) 9.6 kg (stand-alone with 1 energy module) 13.3 kg (stand-alone with 2 energy modules) |
| Dimensions H x W x D | $297 \times 100 \times 167$ mm (stand-alone) $297 \times 100 \times 276$ mm (stand-alone with 1 energy module) $297 \times 100 \times 385$ mm (stand-alone with 2 energy modules) |
| Protection class | IP 20 - closed housing |
| Ambient temperature | -10°C up to +65°C (transport, storage) |
| | 0°C up to +40°C (in operation) |
| Humidity | ≤ 95% (transport, storage) |
| | ≤ 85% (in operation) |
| Cooling | Heatsink convection. Monitoring heatsink temperature |
| Limitation for installations in elevated areas | <2000 m: No limitations / overvoltage category III >2000 m: reduction of performance / overvoltage category II |
| Min. starting voltage level for the system (DC link or Energy storage) | Approx. 45 VDC, e.g. to communicate with the system |
| Min. Operating voltage level Uzmin | Uzstart 180 VDC, e.g. to communicate with the system System ready for operation at Uz >460 VDC |
| Max. Operating voltage level Uzmax | 1000 VDC (IEC) |
| Operation conditions | For start: Uz > Uc |
| 24 VDC In | Galvanically isolated For communication tasks with PxTTX without connecting it to DC link or energy storage, e.g. for setting parameters at the desk (Note: not protected against polarity reversal) |
| Energy of integrated capacities ¹ | 0 kJ (stand-alone) 2 kJ (stand-alone with 1 energy module) 4 kJ (stand-alone with 2 energy modules) |
| Expansion of capacities | Expandable with РхтЕХ for РхтТХ in steps of 2kJ |
| Capacity monitoring | Parameterizable |

¹ Data refer to connection to a DC link of a drive controller with 400 V AC supply voltage. Other data on request.



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| Max. Energy Storage current Ic | 40 A for 3s at $t_{Cycle} = 240s$ |
| Max. Power P _{max} ¹ Ground rule for power flow | 18 kW peak for 3s Pc = Pz |
| Operation frequency level | 15 kHz, in operation load-dependent reduction down to 7.5 kHz Manually adjustable up to 18 kHz (with reduction of power) |
| Load monitoring | DC link side and energy storage side (in each case l ² t) |
| Connection DC link | Front, top |
| Connection for PxTEX or NEV | Front, bottom |
| Communication | 3 digital In 3 digital Out K-Bus interface for operating data output 4 LEDs SD-Card Reset-button for restart Boot-button for boot loading from SD-Card Option: PxTMX plug-on module for fieldbus communication etc. |
| Visualization | Charging indicator for each Energy module (flashing LED according to voltage level) |
| Firmware-Updates | On Koch company site (Fabrikle) or with SD-Card at customers site |
| Protection | Internal fuses Individual protection of each energy module |
| Precharging circuit | Connection directly to DC link interference-free possible, independent from further precharging circuits |
| Reverse polarity protection | To DC link: In case connecting with reverse polarity PxτTX blocks and disconnects the DC link side from energy storage side |
| Charging protection | To DC link in case of Uz < Uc |

¹ Data refer to connection to a DC link of a drive controller with 400 V AC supply voltage. Other data on request.

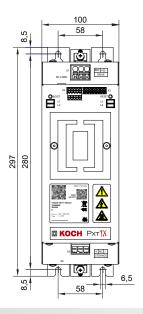


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| Criteria | РхтТХ |
|---|--|
| Max. cable length to DC link | 2 m |
| Max. cable length to energy storage modules | 20 m |
| Parallel operation | Theoretically unlimited number of devices Self-adjusting Automated Master-/Slave-setting for communication |
| Retrofit | Can be retrofitted into existing systems |
| Typeplate/Device information | Electronic via QR-Code: Further device specific information Management-features |
| Internal digital storage | Operation hours meter |

Installation dimensions



We look forward to hearing from you!



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