



Type Approval Certificate

Germanischer Lloyd

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the GL Type Approval System.

Certificate No. 21 154 - 04 HH

Company Elektro Beckhoff GmbH
Eiserstraße 5
D-33415 Verl

Product Description Beckhoff Bus Terminal, Modular I/O System

Type KLXXXX, BK5115, BK5120

Environmental Category D, H, EMC1

Technical Data / Range of Application Bus Terminals Digital Input:
KL1002: 2-Channel 24 V DC Digital Input, Input filter 3 ms
KL1012: 2-Channel 24 V DC Digital Input, Input filter 0.2 ms
KL1104: 4-Channel 24 V DC Digital Input, Input filter 3 ms
KL1114: 4-Channel 24 V DC Digital Input, Input filter 0.2 ms
KL1212: 2-Channel 24 V DC Digital Input, Input filter 3 ms, diagnostics
KL1352: 2-Channel 24 V DC Digital Input for NAMUR Sensors, Input filter 3 ms
KL1362: 2-Channel 24 V DC Digital Input for break-in alarm
KL1382: 2-Channel 24V DC Digital Input for Thermistor
KL1404: 4-Channel 24 V DC Digital Input, Input filter 3 ms
KL1414: 4-Channel 24 V DC Digital Input, Input filter 0.2 ms
KL1408: 8-Channel 24 V DC Digital Input, Input filter 3 ms
KL1418: 8-Channel 24 V DC Digital Input, Input filter 0.2 ms

Test Standard Guidelines for the Performance of Type Approvals, Edition 2003

Documents Test reports : PB0406FB043 dated 2004-06-21, 03/2277-1 / EMV dated 2003-12-03, 352-04 / paconsult dated 2004-04-15, 00ME23056 / UL dated 2003-01-22, Software Questionnaire acc. class 3, dated 2005-01-24, Drawings and documents according to submitted file.

Remarks Tested Temperature: -25°C up to 70°C

Valid until 2010-02-28

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File No. I.B.08

Hamburg, 2005-02-28

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Technical Data /
Range of Application
continuous

Bus Terminals Digital Output :

KL2022: 2-Channel 24 V DC Digital Output, Max. output 2.0 A
KL2032: 2-Channel 24 V DC Digital Output, Max. output 0.5 A (Reverse voltage protection)
KL2134: 4-Channel 24 V DC Digital Output, Max. output 0.5 A (Reverse voltage protection)
KL2408: 8-Channel 24 V DC Digital Output, Max. output 0.5 A (Reverse voltage protection)

System Terminals:

KL 9010: Bus end terminal
KL 9020: Bus end terminal 24 V DC, connection with an Ethernet cable with a RJ45 plug
KL9050: Bus coupler terminal 24 V DC and is the counterpart to the KL9020.
KL9080: Bus potential groups (e.g. 230 V AC/240 V DC)
KL9100: Power feed terminal 24 V DC
KL9110: Power feed terminal 24 V DC, diagnostics
KL9180: Power feed terminal up to 230 V AC, PE contact, Additional power contact 2
KL9185: Power feed terminal up to 230 V AC, Additional power contact 4
KL9186: Potential distribution terminal, additional power contact 8 X 24 V
KL9187: Potential distribution terminal, additional power contact 8 x 0 V
KL9190: Power feed terminal rated load voltage arbitrary
KL9195: Power feed terminal up to 230 V AC, Additional power contact 1, Shielding connection 2
KL9200: Power feed terminal 24 V DC, Integrated fine-wire fuse 6.3 A
KL9210: Power feed terminal 24 V DC, Integrated fine-wire fuse 6.3 A, diagnostics
KL9290: Power feed terminal rated load voltage arbitrary, Integrated fine-wire fuse 6.3 A
KL9540: Surge filter terminal 24 V DC, Surge filter for field supply
KL9550: Surge filter terminal 24 V DC, Surge filter for field and system supply
KL9560: Power supply unit terminal 24 V DC/24 V DC, Insulation voltage in-/output 500 V AC permanent load

Bus Coupler

BK5110: CANopen Bus Coupler 24 V DC, 256 Digital I / O signals
BK5120: CANopen Bus Coupler 24 V DC, 256 Digital I / O signals, 128 Analog I / O signals
BK5210: DeviceNet Bus Coupler 24 V DC, 64 Digital I / O signals
BK5220: DeviceNet Bus Coupler 24 V DC, 64 Digital I / O signals, (255 with K-Bus extension)

Rate of Protection: IP 20

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