

6SE7090-0XX84-3DB1

SIMOVERT MASTERDRIVES Digital Tacho Interface Board

PRODUCT TECHNICAL REFERENCE

Siemens 6SE7090-0XX84-3DB1 is a SIMOVERT MASTERDRIVES DTI digital tachometer interface board. It accepts isolated TTL or HTL encoder signals and passes conditioned tachometer tracks to the connected drive control or synchronization board.

OFFICIAL SOURCE

SIMOVERT MASTERDRIVES DTI - Digital Tacho-Interface Operating Instructions | 6SE7087-6CX84-3DB0, Edition 11.2006

Verified technical profile

SIMOVERT MASTERDRIVES Digital Tacho Interface Board

Board type	DTI digital tachometer interface
TTL input	5 V
HTL input	11 to 30 V
Input isolation	Electrically isolated
External supply	24 Vdc -16%/+25%
HTL supply current	300 mA
TTL supply current	150 mA
Digital limit frequency	400 kHz
TTL terminal	X401
HTL terminal	X402
Drive/TSY output	X403
TTL output	X405
Conductor range	0.5 to 2.5 mm2 inputs
Operating temperature	0 to 55 deg C
Protection degree	IP00
Dimensions	160 x 96 x 56 mm

ENGINEERING USE OF THE VERIFIED DATA

The DTI mounts on a rail and requires a separate isolated 24 Vdc supply; power and control cables are routed separately inside the cabinet. Start-up covers encoder type, TTL/HTL terminal selection, CU2/CUVC/CUVP or TSY connection, screen grounding and the applicable drive parameters.

Verification focus: Confirm the complete 6SE7090-0XX84-3DB1 marking and DB1 hardware.

Only values traceable to the listed manufacturer source are treated as verified technical data.

System role and engineering boundaries

Siemens 6SE7090-0XX84-3DB1 is a SIMOVERT MASTERDRIVES DTI digital tachometer interface board. It accepts isolated TTL or HTL encoder signals and passes conditioned tachometer tracks to the connected drive control or synchronization board.

1

Interfaces either TTL or HTL digital tachometers

2

Provides electrically isolated encoder inputs

3

Routes conditioned pulse tracks to MASTERDRIVES control hardware

4

Adds the DB1 extended X403.6 supply option for compatible configurations

ENGINEERING NOTE

Snap 6SE7090-0XX84-3DB1 onto the mounting rail inside a protective cabinet, use screened cables and bond the screens at X80 and X81. Select only one input connector, X401 for TTL or X402 for HTL, then verify X403/X405 routing and the drive encoder parameters before rotation.

Industrial application matrix

Four source-supported operating contexts for this exact product.

SIMOVERT vector-control feedback

Conditions digital tachometer tracks for CU2, CUVC or CUVP speed-control applications.

SIMOVERT FC synchronization

Routes the DTI output through a TSY tachometer and synchronization board to the drive control.

TTL encoder integration

Receives complementary five-volt pulse tracks through the X401 terminal strip.

HTL encoder integration

Receives higher-level tachometer pulse tracks through X402 with the required external supply.

MODEL-SPECIFIC ACCEPTANCE FOCUS

Confirm 6SE7090-0XX84-3DB1 identity, MASTERDRIVES family and control board, rail and enclosure, TTL/HTL encoder type, X401/X402 selection, X403/X405 routing, 24 Vdc supply, X80/X81 screen grounding, cable length, drive parameters and controlled rotation test before commissioning.

Related-series navigation

Eight verified Apter Power product pages, kept separate from the manufacturer source record.

RELATED APTER POWER SERIES PAGES	
01	3RT6015-1BB41 Apter Power product page
02	6AU1455-2AD00-0AA0 Apter Power product page
03	6ES7314-6BH04-0AB0 Apter Power product page
04	6GK7243-2AX01-0XA0 Apter Power product page
05	6ES7315-2EG10-0AB0 Apter Power product page
06	6ES5928-3UB12 Apter Power product page
07	16249-51-4 Apter Power product page
08	6AV6647-0AG11-3AX0 Apter Power product page

Navigation links only - not manufacturer evidence for technical parameters.

SOURCE RECORD

SIMOVERT MASTERDRIVES DTI - Digital Tacho-Interface Operating Instructions | 6SE7087-6CX84-3DB0, Edition 11.2006

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