

21TX750 - AIR COMPRESSOR DRIVE

This power converter is used to drive **brake compressor** of a metro car as an automatic stand-alone unit.



Under frame mounted power converter. Pressure and other measurements are wired with help of connectors from outside.

TECHNICAL DATA

Input Characteristics:

Nominal input voltage 750 V_{DC}

Auxiliary control power supply 110 VDC

Output Characteristics:

∞ Output voltage $U_{AN} = 0...3 \times 400 \text{ V}_{\text{rms}}$

∞ Output current $I_{AN} = 21 \text{ A}$

∞ Output frequency $f_N = 0..50 \text{ Hz}$

∞ Output power 14.5 kVA

∞ Overload capability

1.5x I_{AN} : at +60°C 5 s/10 min

2.5x I_{AN} : at +60°C 2 s/20 min; $f_N < 60 \text{ Hz}$

Protections

- over current protection
- over voltage protection
- under voltage protection
- earth-fault protection
- output phase supervision
- short-circuit protection
- motor thermal protection
- over and under temperature protection

Applications:

- ∞ Brake Compressor



Mechanical Data

Input		General	
Nominal input voltage	750 Vdc	Efficiency	> 94 %
Operating range	500 V – 1000 VDC	Temperature range	-40 ...55°C
AC-output		Humidity	Less than 95%
Three-phase voltage	3x400Vac (± 5%)	Cooling	Convection cooled
Frequency	0..50 Hz	Dimensions in mm	380x670x435
Continuous power	14.5 kVA	Weight	74 kg
Max. output power	21 kVA	Mounting	Under frame
		Housing	IP 65

Complying standards

Electrical particles	EN 50207, Railway applications – Electronic power converters for rolling stock
Vibration shock etc.	EN 50155, Railway applications – Electronic equipment used on rolling stock
EMC	EN 50121-3-2, EMC on board rolling stock

Block diagram

