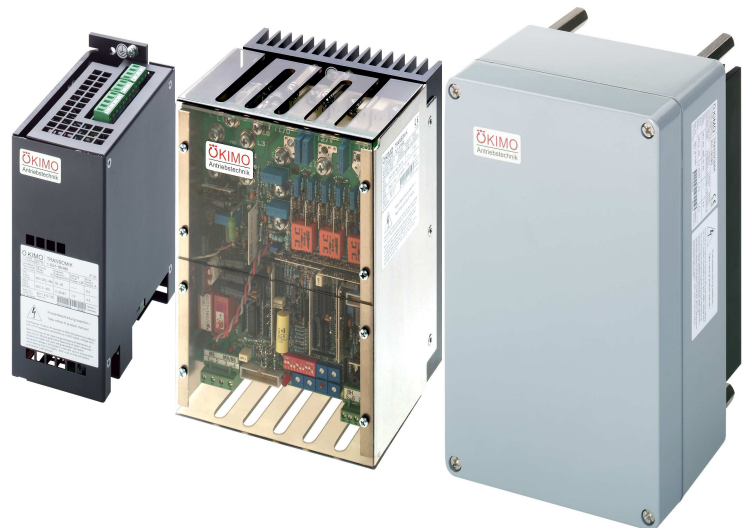


TRANSOMIK[®] U1

Frequency Inverter

**Speed control (open and closed loop)
of three-phase motors up to 30 kW**



Features

- ◆ Self optimizing PWM without a fixed switching frequency with the following advantages:
 - Low motor noise
 - High starting torque
 - Optimum smooth rotation at very low speeds
- ◆ DC braking possible without a braking chopper
- ◆ Control voltage derived from DC link:
 - Operation at 80 V and up to 800 V
 - Controlled braking possible during input power failure
 - Supply from DC source possible
- ◆ Easy to service - all control connections pluggable
- ◆ No parameter setting necessary
- ◆ Space for fitting communications or customized options

User benefits

Installation

- ◆ Unit input voltage range from 100 up to 480 V for all usual supply systems 1-/ 2-/ 3-phase or DC
- ◆ Earth leakage current ≤ 3.5 mA
Use with equipment without fixed connection
- ◆ All types of three-phase motors

EMC

- ◆ Low RF emission due to the use of a new special IGBT control method
- ◆ No costly dV/dt filters necessary
- ◆ No screened motor cables necessary

TECHNICAL DATA

Rated values Motor (induction):	TRANSOMIK 1.5U1-18/480	TRANSOMIK 3U1-18/480	TRANSOMIK 4U1-18/480	TRANSOMIK 7U1-18/480	TRANSOMIK 15U1-18/480	TRANSOMIK 22U1-18/480	TRANSOMIK 2U1-18/480	TRANSOMIK 5U1-18/480
------------------------------------	---------------------------	-------------------------	-------------------------	-------------------------	--------------------------	--------------------------	-------------------------	-------------------------

Input:

Voltage range:	DC	V	250...680	250...680				250...680	
	50/60 Hz	3AC	V	200...480	200...480	200...480			200...480
		2AC	V	200...480	200...480				200...480
	1/NAC	V	100...240	100...240				100...240	
Rated input current	A	6	10	9	18	30	40	8	15
Earth leakage current	A	10	10	10	20	32	40	10	16
Supply fuse	mA	≤3.5	≤3.5				≤3.5		

Output:

Voltage at 0...200 Hz	V	3AC 0...400	3AC 0...400				3AC 0...400		
Power with 400 V	kW	1.5	3.0	4.0	7.5	15	22	2.2	5.5
Current	A	4.0	7.0	9.0	18	30	44	6.0	12
Switching frequency	kHz	2.5	2.5				2.5		
Approx. losses	W	60	120	150	250	400	420	100	200
Motor cables unscreened	m	0...30	0...30				0...30		

Installation, Mounting:

Weight	kg	2.0	3.5	7	7.5	11	12	7	11	
Dimensions:	- Height	mm	220/320	228/330	310/360	415	470	510	280/380	280/380
	- Width	mm	90/110	165/185	165/185	165/185	165/185	165/185	180/200	230/250
	- Depth	mm	172	155	155	155	175	175	145	195
Protection		IP20	IP20				IP65			
Cooling		Convection	Convection		Fan 70 mA 2AC 230 V	Fan 110 mA, 2AC 230 V		Convection		
Clearance for cooling:	- upper	mm	50	0	0	0	0	50	50	
	- lower	mm	50	50	0	0	0	50	50	
	- left, right	mm	10	10	10	10	10	10	10	
Order No		8511.412-100	8511.414	8511.415	8511.417	8511.422	8511.423	8511.413-200	8511.416-200	

RANGE OF APPLICATION

Rated values of supply voltage	Load type	Max. rated power of motor [kW]															
		0.25	0.37	0.55	0.75	1.1	1.5	2.2	3.0	4.0	5.5	7.5	11	15	18.5	22	30
DC 500...680 V 3AC 400...480 V (Motor 3AC 400 V)	KM						◆	○	●	●	○	●		●		●	
	QM								◆	○	●	●	○	●		●	●
DC 250...680 V 3AC 200...480 V (Motor 3AC 230 V)	KM				◆	○	●	●	○	●	●	○	●	●			
	QM					◆	○	●	●	○	●	●	○	●	●		
2AC 400...480 V (Motor 3AC 400 V)	KM				◆	○	●	○									
	QM					◆	○	●	○								
2AC 200...480 V (Motor 3AC 230 V)	KM		◆	○	●	○											
	QM			◆	○	●	○										
1/N AC 200...240 V (Motor 3AC 400 V)	KM			◆	○	●	○										
	QM				◆	○	●	○									
1/N AC 100...240 V (Motor 3AC 230 V)	KM	◆	○	●	○												
	QM		◆	○	●	○											

◆ = Book form
 ○ = Protection IP65
 ● = Standard type protection IP20

CT = Normal operation with 50 % overload capability
 QT = Operation at higher powers with 15 % overload capability

For other voltages and communication or technology boards please inquire

Optimum drive solutions from 0.25 up to 2000 kW and from 110 up to 690 V

