

# TRANSOMIK<sup>®</sup> U2

## Regenerative Frequency Inverter

Speed control (open and closed loop)  
of three-phase motors up to 200kW



## 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
- ◆ Power regeneration
- ◆ No braking chopper required
- ◆ Control voltage derived from DC link:
  - Operation at 80 V and up to 800 V
  - Supply from DC source possible
- ◆ Easy to service - all control connections pluggable
- ◆ No parameter setting necessary
- ◆ Space for fitting communication or customized options

## User benefits

### Installation

- ◆ Unit input voltage range from 200 up to 480 V for all usual supply systems 3-phase or DC
- ◆ Earth leakage current  $\leq 3.5$  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			
4U2-18	7U2-18	15U2-18	22U2-18

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30U2-18	45U2-18

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75U2-18	110U2-18	160U2-18

### Input:

Voltage range:	DC	V	250...680				250...680		250...680		
	50/60 Hz	3AC	V	200...480				200...480		200...480	
Rated input current		A	9	18	30	40	60	90	150	200	295
Supply fuse / Circuit breaker		A	10	20	32	40	63	100	150	200	300
Supply cable		mm <sup>2</sup>	1/1.5	2.5/4	4/6	6/10	10/16	16/25	35/50	50/70	95/120
Earth leakage current		mA	≤ 3.5				approx. 8		approx. 12		

### Output:

Voltage with 0...200 Hz	V	3AC 0...400				3AC 0...400		3AC 0...400		
Power with 400 V	kW	4.0	7.5	15	22	30	45	75	110	160
Current	A	9	18	30	41	60	90	150	200	295
Motor cable not screened <30 m	mm <sup>2</sup>	1/1.5	2.5/4	4/6	6/10	10/16	16/25	35/50	50/70	95/120
Switching frequency	kHz	2.5				2.5		2.5		
Approx. losses at rated power	W	120	250	400	420	700	1000	1500	2000	3000

### Installation, Mounting:

Weight	kg	7	7.5	11	12	32	37	62	68	70	
Dimensions:	- Height	mm	375/425	480	510	525	765	780	1150	1150	1150
	- Width	mm	165/185	165/185	165/185	165/185	265	265	265/300	270/300	270/300
	- Depth	mm	155	155	175	175	250	300	380	400	400
Protection class		IP20				IP00		IP00			
Cooling		Convection	Fan AC 230 V / 25 VA				Fan DC 24 V / 7 W		Fan AC 230 V / 100 VA		
Clearance for cooling:	mm	0	0	0	0	0	0	0	0	0	
	- upper	mm	50	0	0	0	0	0	0	0	
	- lower	mm	10	10	10	10	0	0	0	0	
	- left, right	mm									
Power terminals		Terminals				Screw connections					
- Type		M5	M5	M5	M5	M8	M8	M8	M8	M8	
- Max. torque											
- Supply terminals	Nm	0.5	1.5	1.5	1.5	9	9	9	9	9	
- Motor terminals	Nm	0.5	2	2	2	9	9	9	9	9	
- PE connection	Nm	3	3	3	3	9	9	9	9	9	
Order No		8512.415	8512.417	8512.422	8512.423	8512.424	8512.426	8512.428	8512.430	8512.432	

# RANGE OF APPLICATION

Rated values of supply voltage	Load type	Max. rated power of motor [kW]																		
		2.2	3	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	110	132	160	200
DC 500...680 V 3AC 400...480 V (Motor 3AC 400 V)	KM			4 U2		7 U2		15 U2		22 U2	30 U2		45 U2		75 U2		110 U2		160 U2	
	QM				4 U2		7 U2		15 U2		22 U2	30 U2		45 U2		75 U2		110 U2		160 U2
DC 250...680 V 3AC 200...480 V (Motor 3AC 230 V)	KM	4 U2		7 U2		15 U2	22 U2		30 U2	45 U2		75 U2		110 U2		160 U2				
	QM		4 U2		7 U2		15 U2	22 U2		30 U2	45 U2		75 U2		110 U2		160 U2			

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

