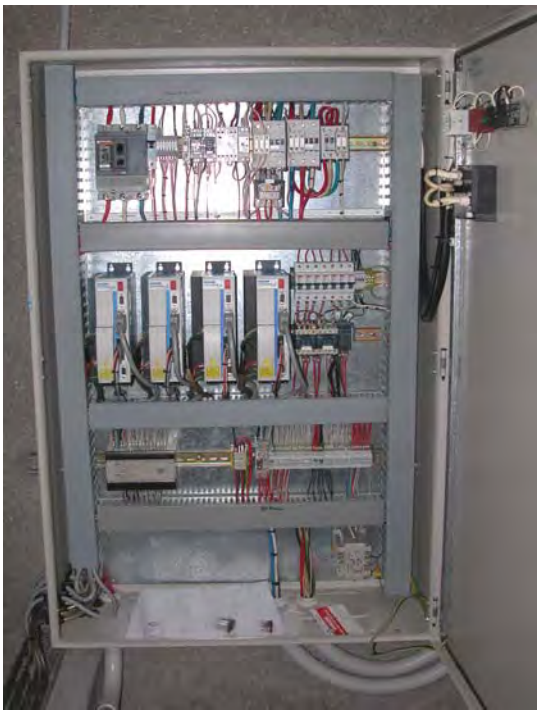
MOTION TECHNOLOGIES PTY LTD

BRUSHLESS LOW VOLTAGE DC MOTOR DRIVES

For Motor up to 2.2kw, DC supply:
2 Types
- Economical 2 Quadrant speed controllers
- Digital closed loop servo drives



Series ZWSK

2-Quadrant Variable Speed Drives For BLDC Motors

- **24 & 36 vDC**
- **5 & 10 amps**

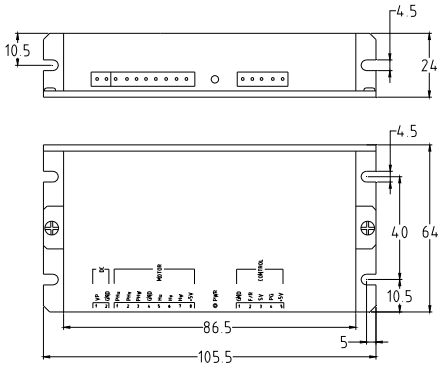
Specifications

Specifications	Model	24ZWSK		36ZWSK	
		05-S	10-S	05-S	10-S
Voltage	VDC	24(30V max)		36(45V max)	
Phase		3-Phase			
Peak Current	A	5	10	5	10
Continuous Current	A	2.5	5	2.5	5
Hall Sensor		3 hall sensors, 120deg(electrical) angle, 6.25V operation.			
Inner DC Line Fuse	A	5	10	5	10
Speed raising time	S	0.5-10			
Input signals		5V TTL or 5V CMOS			
Max Speed(SV=5V)		1500rpm/3000rpm/6000rpm/12000rpm(optional)			
Control mode (Optional)		PI speed close-loop control			
Low Voltage Protection	V	16V min		26V min	
Dimensions		105.5mmX64mmX24mm			
Chopping frequency	KHz	15			
Weight	Kg	0.2			

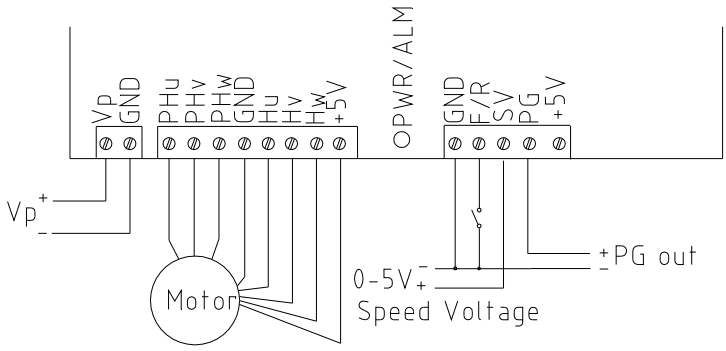
Control signals

- F/R High=Forward, Low=Reverse.
- SV Speed voltage input 0-5V.
- PG Speed pulse output (OC output) 24pulses/r @ 8 poles.

Dimensions (mm)



Connections



Series ZWSK

2-Quadrant Variable Speed Drives For BLDC Motors

- **24,36 or 48 vDC**
- **15,29,30 or 50 amps**

Specifications

Specifications	Model	24ZWSK15	36ZWSK15	48ZWSK15	24ZWSK		36ZWSK		48ZWSK		48ZWSK50-B
					20-B	30-B	20-B	30-B	20-B	30-B	
Voltage	VDC	24 (30V max)	36 (45V max)	48 (56V max)	24 (30V max)		36 (45V max)		48 (56V max)		48 (56V max)
Phase	A	3-Phase									
Peak Current	A	15	15	15	20	30	20	30	20	30	50
Continuous Current	A	7.5	7.5	7.5	10	15	10	15	10	15	25
Hall Sensor		3 hall sensors, 120deg(electrical) angle, 6.25V operation.									
Inner DC Line Fuse	A	15	15	15	N/A						
Speed raising time	S	0.5-10									
Input signals		5V TTL or 5V CMOS (6.25V max)									
Max Speed(SV=4V,SVgain=1)		1500rpm/3000rpm/6000rpm/12000rpm(optional)									
Speed Voltage (SV) gain		0-1.0 (Gain-1 @SV ADJ on the Right)									
Control mode		PI speed close-loop control									
Low Voltage Protection	V	16V	26V	36V	16V		26V		36V		16V
Dimensions		161.5mmX81.2mmX24mmX31mm			161.5mmX82mmX24mmX45mm						221mmX82mmX45mm
Chopping frequency	KHz	15									
Weight	Kg	0.3			0.4						0.5

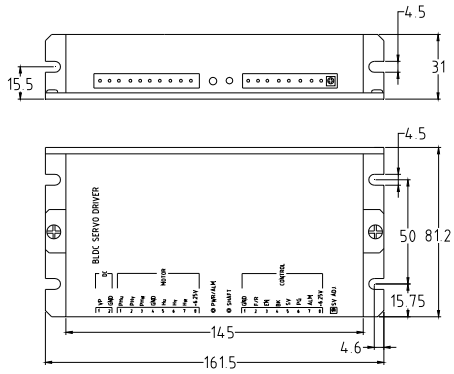
Control signals

- F/R - High=Forward, Low=Reverse.
- EN - High=Disable, Low=Enable.
- BK - Low=Motor brake, Hight=Operating.
- SV - Speed voltage input 0-5V.
- PG - Speed pulse output (OC output) 24pulses/r @ 8 poles.
- ALM - Alarm output (OC output), Low=Alarm

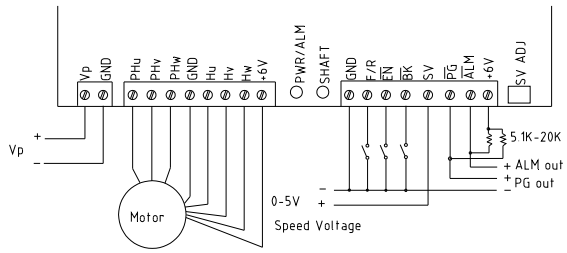
Dimension

❖ 24,36ZWSK15

- **Dimensions (mm)**

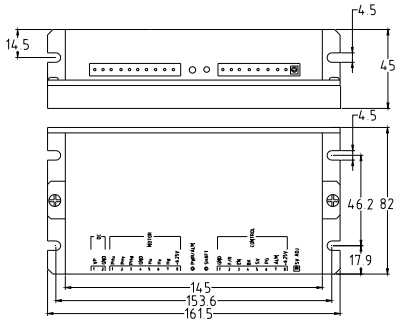


- **Connections**

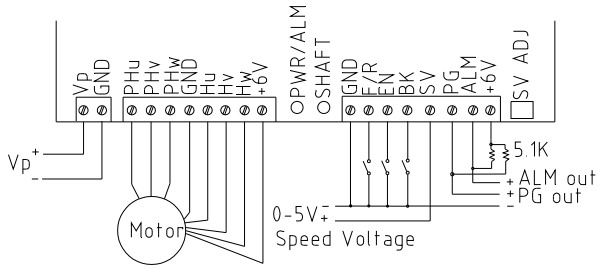


❖ 24,36,48ZWSK20-B,30-B

- **Dimensions (mm)**

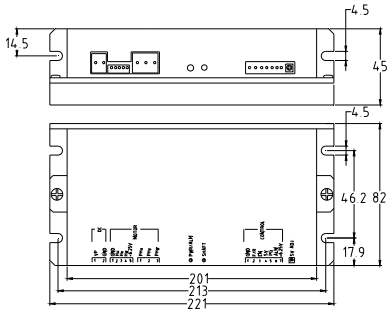


- **Connections**

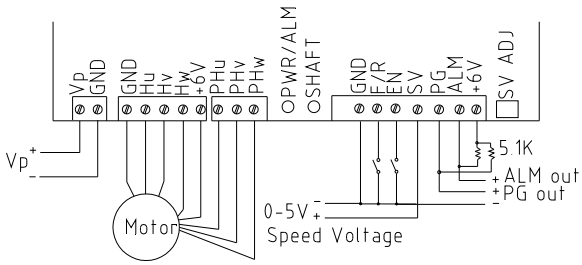


❖ 48ZWSK50-B

- **Dimensions (mm)**



- **Connections**

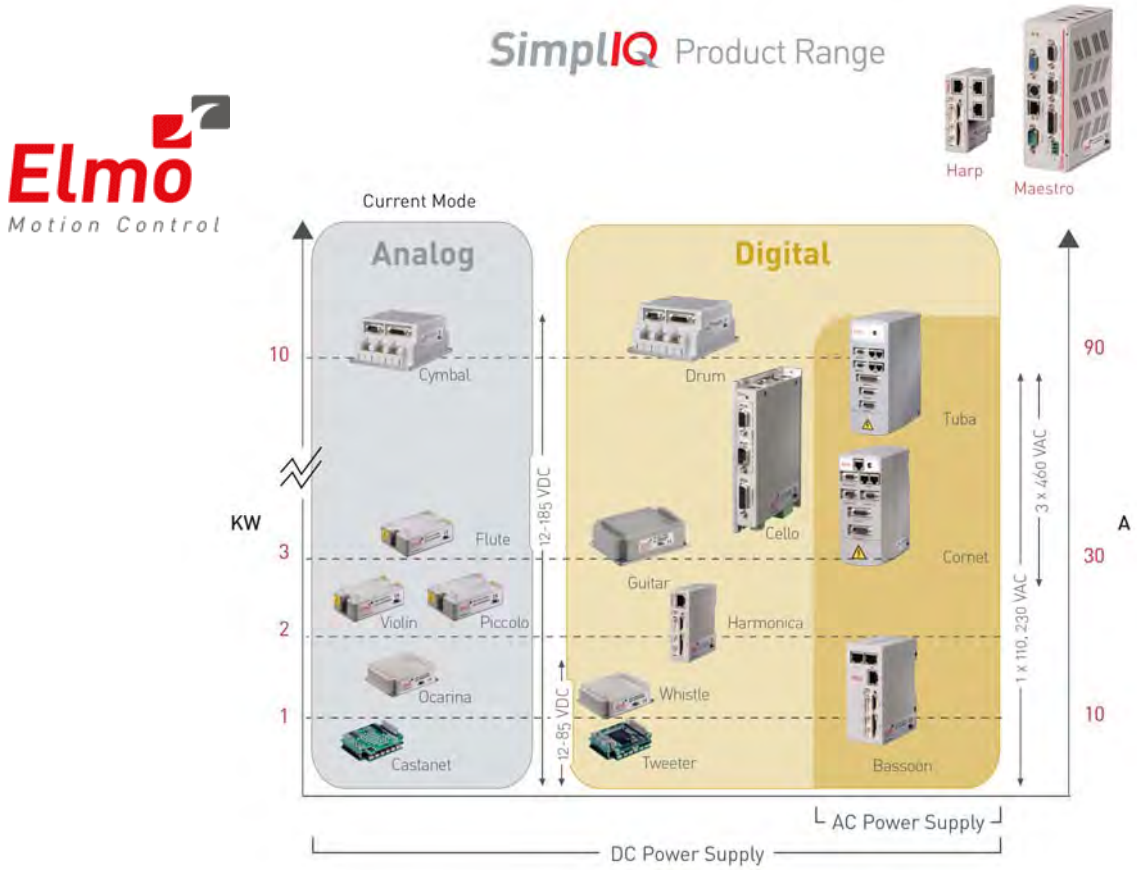


AC, DC Intelligent Digital Servo Drives Controllers

Servo Controllers for DC Brush Servo or Brushless Motors with Incremental Encoder, Resolver, Digital Halls, Analog SINCOS, Absolute, Analog Halls, Tacho, and Potentiometer Feedbacks

Current, Velocity, Advance Position Operation Modes, Analog, PWM, Pulse and Direction, Software Commands- RS-232, CANopen, DS 301 and DSP 402 Communications

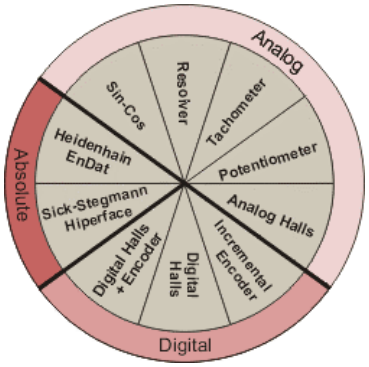
- Elmo's SimplIQ digital servo drives combine high densities of power, intelligent functionality and space friendly design.
- The drives integrate Elmo's advanced, SimplIQ motion control core technology, which enables superior control performance, offers advanced programming capabilities and supports standard communication protocols.
- All the drives in the series include a fully digital motion controller that features current, velocity and position loops and selection of commutation types and position feedbacks.
- The result: higher dynamics and increased precision for a wide variety of applications.

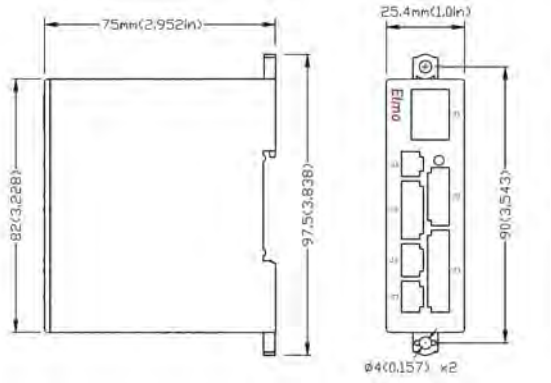


		Model Name								
Feature	**Unit**	**Tweeter**	**Whistle**	**Harmonica**	**Cello**	**Drum**	**Bassoon**	**Cornet**	**Tuba**	**Guitar**
Supply Voltage Range	**VDC**	**7.5 ~ 95**	**7.5 ~ 95**	**10 ~ 195**	**10 ~ 195**	**11 ~ 390**				**11 ~ 195**
Supply Voltage Range	**VAC**						**1x30 ~ 270**	**1x60 up to 3x505**	**1x60 up to 3x505**	
Motor	**DC Brush, or Brushless Sinusoidal, trapezoidal**									
Operating Modes	**Current, Velocity, Position & Advance Position**									
Commands	**Analog, PWM, Pulse and Direction, Software Commands**									
Feedbacks	**Incremental Encoder, Resolver, Digital Halls, Analog SIN-COS, Adsolute, Analog Hall, Tacho Potentiometer**									
Cont. Output Current	**A**	**2.5 ~ 3.3**	**1 ~ 20**	**2.0 ~ 13.3**	**2.25 ~ 30**	**18 ~ 90**	**1 ~ 6**	**1.4 ~ 9**	**12 ~ 20**	**3 ~ 45**
Output Power Range	**KW**	**0.16 ~ 0.2**	**0.05 ~ 1.60**	**0.20 ~ 1.10**	**0.24 ~ 3.40**	**2.7 ~ 9.6**	**0.32 ~ 1.90**	**0.42 ~ 3.40**	**3.60 ~ 11.30**	**0.48 ~ 4.8**
Digital In, Out, Analog In		**6/02/2001**	**6/02/2001**	**6/02/2001**	**10/05/2002**	**6/02/2001**	**6/02/2001**	**10/06/2002**	**10/06/2002**	
Communications	**RS-232, CANopen DS 301, DSP 305 and DSP 402**									
Programming	**SimpleIQ Programming**									
Software Tools	**Composer**									
Memory	**Up to 32KB**									

Harmonica BLDC Drive with feedback.

- Intelligent compact digital servo drives for DC brush, brushless and linear motors.
- Compact servo drives support up to 13.3 amps.
- Capable of delivering a peak of 2200W of power and 1100W of continuous power.
- Capable of operating in position, velocity and current modes and contains a wide range of feedback and I/O options.
- By using Elmo's Composer software, users can easily perform drive setup, configuration, tuning, analysis and programming.
- The drive operates on DC power. AC version available
- Small case enables an efficient and cost saving implementation.





		Harmonica model HAR - X / XXX										
Feature	**Units**	**5/60**	**8/60**	**12/60**	**2/100**	**4/100**	**8/100**	**12/100**	**1/200**	**2/200**	**4/200**	**6/200**
Minimum supply voltage	VDC	10			20				40			
Nominal supply voltage	VDC	50			85				170			
Maximum supply voltage	VDC	59			95				195			
Efficiency at rated power (at nominal conditions)	W	250	400	650	200	320	640	1100	200	320	640	1100
Maximum output voltage	%	>97										
Auxiliary supply voltage		>97% of DC bus voltage at f=22 kHz										
Auxiliary power supply	VDC	24 ± 20%										
Amplitude power	VA	8										
Amplitude sinusoidal/DC continuous current	A	5	8	13.3	2.5	4	8	13.3	1.25	2	4	6.6
Sinusoidal continuous RMS current limit (Ic)	A	3.5	5.7	9.4	1.8	2.8	5.7	9.4	0.9	1.4	2.8	4.7
Peak current limit	A	2 x Ic										
RMS output power without heatsink	%	10	50	20	100	50	20	20	100	50	20	20
Weight	g(oz)	150g (5.3 ounces)										
Dimensions	mm (in)	82 x 25.4 x 75 (3.2" x 1.0" x 3.0")										
Digital in/Digital out/Analog in		6/02/2001										
Mounting method		Wall mount ("Bookshelf") of DIN rail										

Other MT Products

ROLLON

Haydon kerk Motion Solutions

LinMot®

TRIO MOTION TECHNOLOGY

Solutions by DANAHER MOTION

Distributors for Australia & New Zealand

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