

ME320LN^{new} Series

Closed loop AC elevator drive




For gearless & geared applications

Application Features

- Smooth ride performance
- Integrated brake control
- Easy setup with default factory setting for rapid commissioning
- 5 independent S-Ramps
- Short-floor function
- Direct approach function
- Light load direction sensing
- 60 Vdc rescue function
- 220 Vac UPS (sine & quasi square type)

Enhanced reliability with conformal coating, protects against humidity and dust pollution

Operation in high ambient temperatures  45°C_{avg}

Cooling fan removable for easy maintenance



*1 PC-Tools software offers simplified start up & backup

Optional: hot pluggable remote keypad



*2 Multilingual keypad with memory
Languages include:
English, Turkish, Italian & Russian



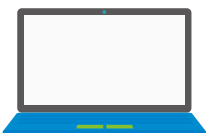
18.5 kW~30 kW



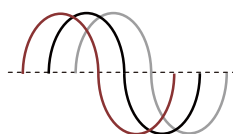
Optional memory



3.7 kW~15 kW



Wide operating voltage range 323 to 528 Vac



Drive Key Features

- Non-rotational encoder phase offset tuning
- Flexible programmable I/O's
- Onboard Modbus-RTU
- Comprehensive trip diagnostics
- Built-in dynamic braking unit
- Anti-rollback function for PMSM gearless machines
- Pre-torque function
(Analog signal from load cell for geared machines)

*1 compatible with Windows 7

*2 available soon





3.7 kW~15 kW

Optional: hot pluggable LCD/LED remote keypad



MDKE9

*Multilingual keypad with memory. Languages include: English, Turkish, Italian and Russian



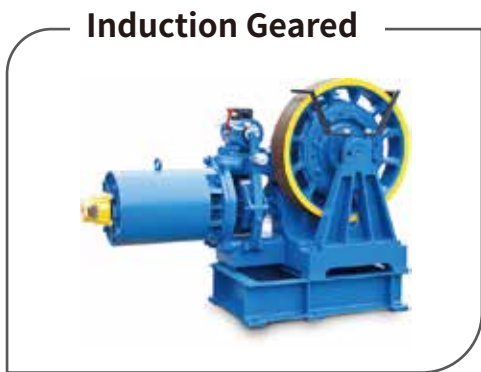
MDKE

Without memory



MDKE6

With memory for parameters upload/download



Encoder Types



MCTC-PG-C

SinCos encoder card, 5 Vdc supply
Terminal Block connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5 V HTL)



MCTC-PG-C2

SinCos encoder card, 5 Vdc supply
Female 15-way D-type connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5 V HTL)



SinCos ERN1387
Inovance EI53C9.25
encoder with C, D signals



MCTC-PG-C3

SinCos encoder card, 5 Vdc supply
Female 15-way D-type connector
Non-scalable 1:1 encoder emulation output
(Quadrature: A,A',B,B') @ 5 V HTL)



MD32PG5

SinCos encoder card, 5 Vdc supply
Terminal Block connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5-24 V HTL)



SinCos EnDat 2.0/2.1
ECN1313/413 encoders



MCTC-PG-B

Quadrature incremental encoder card
(A, A', B, B') with UVW commutation signals
5 Vdc supply, Terminal Block connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5-24 V HTL)



High resolution quadrature
incremental encoder with
commutation signals



MCTC-PG-A4

Single-ended incremental encoder card
15 Vdc Supply, Terminal Block connector
Scalable 1:1~64 encoder emulation output
(Single-ended: A, B, 0 V @ 5-15 V HTL)



Incremental encoders
(A, B, Z @ 10-30 Vdc)



MCTC-PG-B

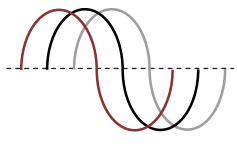
Quadrature incremental encoder card (A, A', B, B')
5 Vdc supply, Terminal Block connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5-24 V HTL)



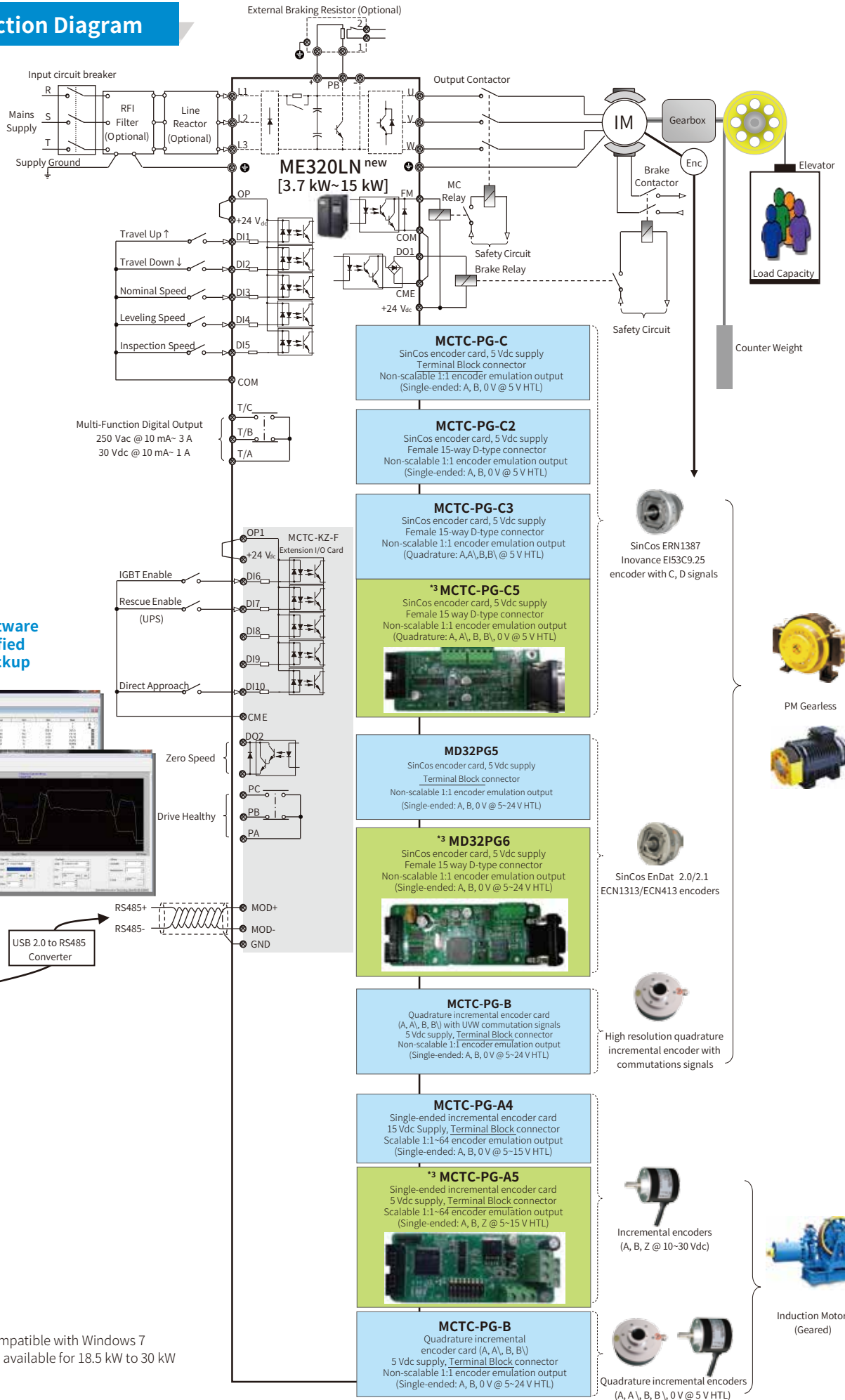
Quadrature
incremental encoders
(A, A', B, B', 0 V @ 5 V HTL)

*2 available soon

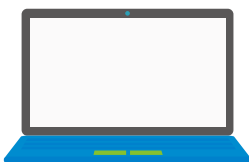
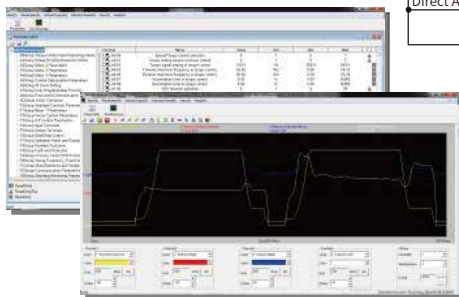
General Connection Diagram



Wide operating voltage range
323 to 528 Vac



*1 PC-Tools software offers simplified start up & backup



*1 compatible with Windows 7
*3 PG available for 18.5 kW to 30 kW

SinCos ERN1387
Inovance EI53C9.25
encoder with C, D signals



PM Gearless



Induction Motor (Geared)

SinCos EnDat 2.0/2.1
ECN1313/ECN413 encoders

High resolution quadrature
incremental encoder with
commutations signals

Incremental encoders
(A, B, Z @ 10-30 Vdc)

Quadrature incremental encoders
(A, A', B, B', 0V @ 5V HTL)

Closed loop AC elevator drive

General Specifications

380 to 480 Vac, -15% to 10% (323 to 528 Vac)

Model	Frame Size	Input Current [A]	Output Current [A] *4	Applicable Motor [kW]	Dimension [mm]			Dynamic Braking Resistor		
					Height [H]	Width [W]	Depth [D]	Min [Ω]	Max [Ω]	Min Recommended Power [W]
ME320LN-4003-SA	D	10.5	9	3.7	248	160	183	130	170	1,100
ME320LN-4005-SA		14.6	13	5.5				90	115	1,600
ME320LN-4007-SA	E	20.5	18	7.5	322	208	190	65	85	2,500
ME320LN-4011-SA		29	27	11				43	55	3,500
ME320LN-4015-SA		36	33	15				32	43	4,500
ME320LN-4018-SA	F	41	39	18.5	350	335	192	25	34	5,500
ME320LN-4022-SA		49.5	48	22				22	24	6,500
ME320LN-4030-SA	G	57	60	30	400	380	230	16	20	9,000

*4 Carrier switching frequency 6 kHz at rated output current @ 150% overload for 60 sec & 180% for 3 sec

Please note: all units have IP20 rated enclosures and are fan cooled

RFI Filter & AC Line Reactor Specifications

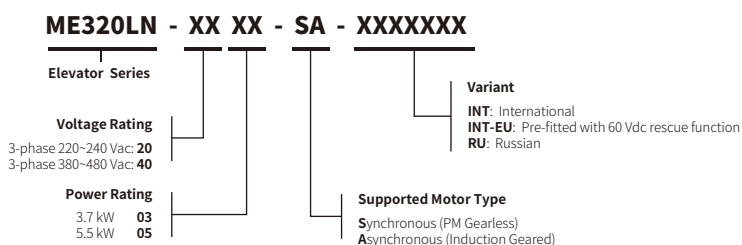
380 to 480 Vac, -15% to 10% (323 to 528 Vac)

Model	Frame Size	Input Current [A]	Power Capacity [kVA]	Optional External RFI Filter		Optional AC Input Reactor Model (Inovance)
				RFI Filter Model (Changzhou Jianli)	RFI Filter Model (Schaffner)	
ME320LN-4003-SA	D	10.5	5.9	DL-16EBK5	FN3258-16-44	MD-ACL-10-4T-372-2%
ME320LN-4005-SA		14.6	8.9			MD-ACL-15-4T-552-2%
ME320LN-4007-SA	E	20.5	11	DL-25EBK5	FN3258-30-33	MD-ACL-30-4T-113-2%
ME320LN-4011-SA		29	17	DL-35EBK5		
ME320LN-4015-SA		36	21	DL-50EBK5		
ME320LN-4018-SA	F	41	24	DL-50EBK5	FN3258-42-33	MD-ACL-50-4T-183-2%
ME320LN-4022-SA		49.5	30		FN3258-55-34	
ME320LN-4030-SA	G	57	40	DL-65EBK5	FN3258-75-34	MD-ACL-80-4T-303-2%

Please note:

- In CE countries, recommended RFI filter must be fitted together with screened cables to ensure EMC compliance
- All units have IP20 rated enclosures and are fan cooled

Product Code



Monarch BST

An Inovance Company

We Pioneered NICE Integrated Solutions for Elevators
>2,000,000 Installations Worldwide

