

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



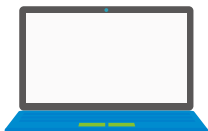
Optional memory



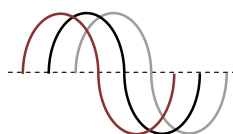
18.5 kW~30 kW



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



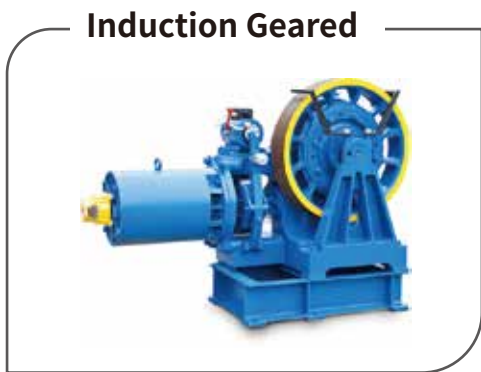
MDKE

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

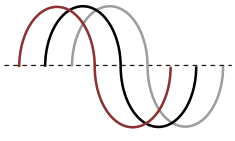
Quadrature incremental encoder card (A, A', B, B')
5 Vdc supply, Terminal Block connector
Non-scalable 1:1 encoder emulation output
(Single-ended: A, B, 0 V @ 5-24 V HTL)



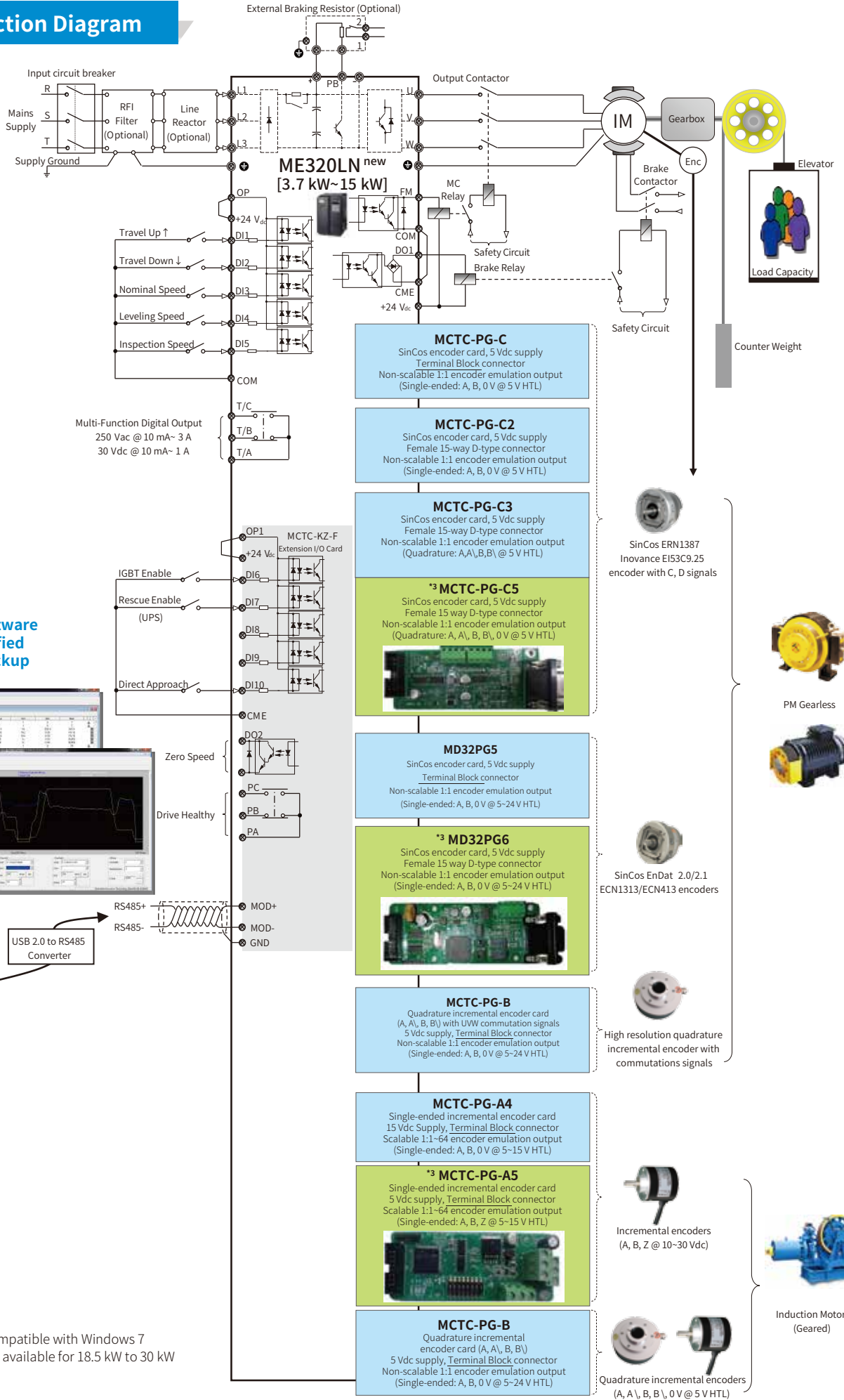
Quadrature
incremental encoders
(A, A', B, B', 0 V @ 5 V HTL)

*2 available soon

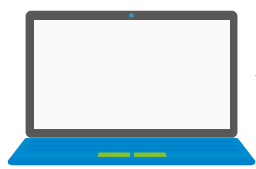
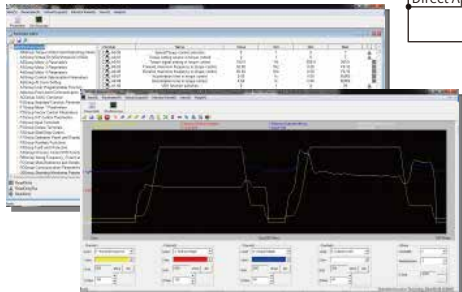
General Connection Diagram



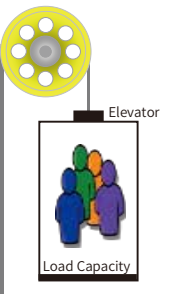
Wide operating voltage range
323 to 528 Vac



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



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



Counter Weight



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



PM Gearless



Induction Motor (Geared)



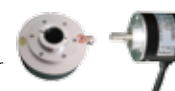
SinCos EnDat 2.0/2.1
ECN1313/ECN413 encoders



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

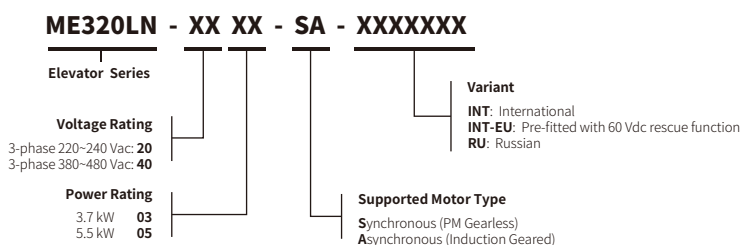
380 to 480 Vac, -15% to 10% (323 to 528 Vac)

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

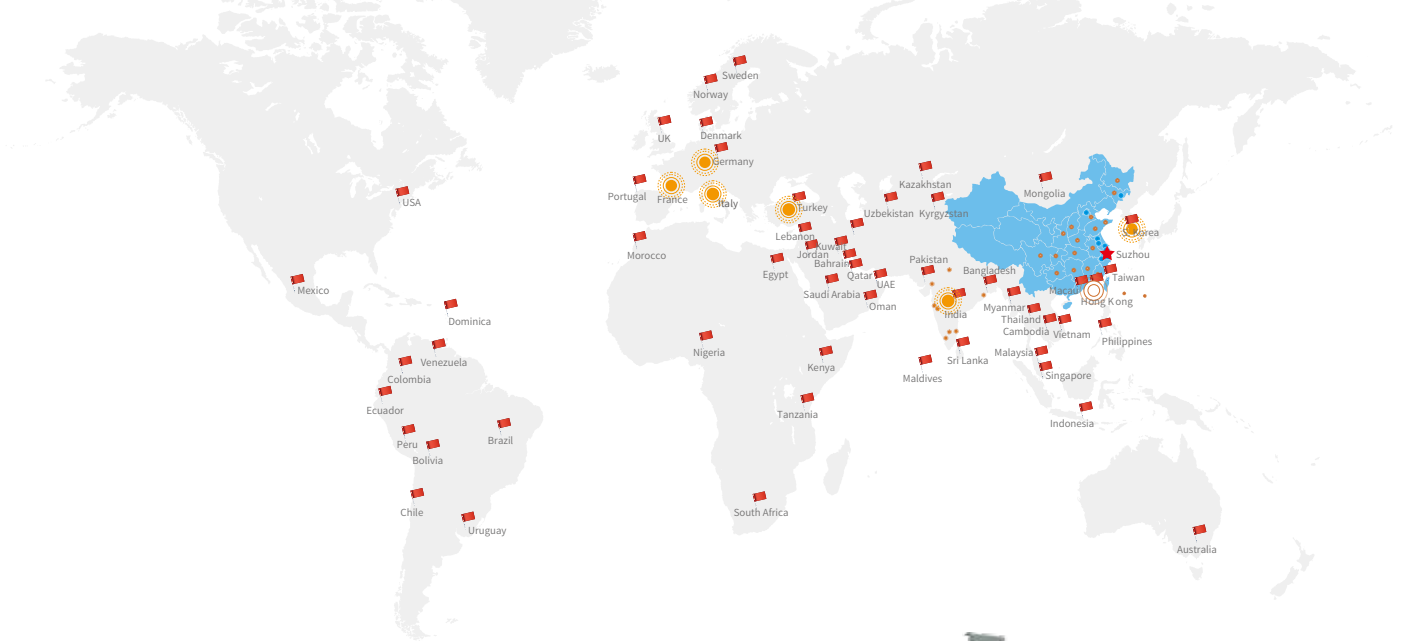
Product Code



Monarch BST

An Inovance Company

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



INOVANCE

Forward, Always Progressing

International Offices

📍 **Hong Kong SAR (export office)**

Tel: +852 2751 6080
info@inova-automation.com

📍 **South Korea-Seoul**

Tel: +82 (0) 10 7428 5732
info@inova-automation.com

📍 **India**

Head Office Chennai
Tel: +91 (0) 44 4380 0201
Ahmedabad
Tel: +91 (0) 79 4003 4274
Mumbai Tel: +91 (0) 22 4971 5883
Delhi Tel: +91 (0) 11 4165 4524
Sales Network in Kolkata, Bengaluru,
Coimbatore, Hyderabad, Pune
info.inovaindia@inova-automation.com

📍 **Germany-Stuttgart**

Tel: +49 (0) 7144 8990
sales@powerautomation.com
www.powerautomation.com

📍 **Italy-Milano**

Tel: +39 (0) 2268 22318
info@inova-automation.it

📍 **France-Bordeaux**

Tel: +33 (0) 5594 01050
pa.france@powerautomation.com

📍 **Turkey-Istanbul**

Tel: +90 (0) 21 6706 1789
info.turkey@inova-automation.com

Inovance Technology Companies

Shenzhen Inovance Technology Co. Ltd.
Suzhou Inovance Technology Co. Ltd.
Suzhou Monarch Control Technology Co. Ltd.
Shanghai BST Electric Co. Ltd.

For other country distributors, contact the Hong Kong export office.



Inovance Technology
www.inovance.com