

M700 / M702

AC and servo inverters for manufacturing automation

Instruction manual

Basic M700 Demo Drive and Motor Setup using MConnect Software



Distributor for:





EPA Drives

	Thank you for choosing to work with EPA!
	EPA - your competent partner for Nidec / Control Techniques when it comes to individual service & comprehensive services .
	If you have any questions about the product, please feel free to call us: Tel: +49 (0)6181 – 9704 – 0
	You can find the latest information about us and our products at www.epa.de .
Sales department:	EPA GmbH
	Fliederstraße 8, D-63486 Bruchköbel Deutschland / Germany
	Telefon / Phone: +49(0)6181 9704-0 Telefax / Fax: +49(0)6181 9704-99
	E-Mail: info@epa.de Internet: www.epa.de
Author:	Control Techniques Ltd
Release:	4 / 20.11.2017
Article:	M700 / M702





This Application Note applies to the M700 & M702 Drive Series

Basic M700 Demo Drive and Motor Setup using MConnect Software

This application note will demonstrate how to set up the M700 demo for Analog Velocity Mode using MConnect software. The application note will focus specifically on using the MConnect software and will assume the user has an Ethernet patch cable connected to the drive with a PC static IP address set to be able to communicate to drive IP address 192.168.1.100 along with a M700 demo unit connected to 230 Vac input voltage.

After opening the MConnect software select 'New project'. Keep the default 'Empty Project' enter a Name for the project or accept the default name shown by Selecting 'OK'.

Project Management ×	
Set-up and work wit	h sets of drives.
Create or Open a Project	Recent Projects
New project	1 My Project 15 -III
Open	Available templates:
Build a Project from a Ne	Scan serial RTU network
Scan Ethernet netwo	Scan all connected drives
Scan serial RTU net	Name: My Project 16
	Location: C:\Users\kowen\Documents\Control Techniques\Unidrive M Connect
Scan all connected c	OK Cancel
	Control Techniques Website



In the top right corner select 'Add drive':

File tome View	
Add drive	
Project Devices	
My Project 16	

Enter an optional 'Name' and make selections for the Model, Mode, Region, and Communications as shown below. When finished select 'Ok':

🭓 New drive		×
Name an Choose the name	me and type of the new drive	
Name:	M700_Demo	
Drive Type:	Unidrive M700	
Model -		
Model:	03200050 Set model	
Rating:	0.75kW (5A)	
Voltage:	200V	
Mode an	d region	
Mode:	RFC-S	
Region:	60Hz	
Commun Enter the settin	ications ngs for connecting to this drive:	
Protocol:	Ethernet 💌	
IP address:	192.168.1.100	
	V OK X Cancel	



<u>Select 'Help' in the 'File' tab above to access the third pane in MConnect software that has</u> <u>useful parameter information while navigating through the MConnect project:</u>

Regimes Helps Uter Regimes Helps Des Regimes Helps Regimes Help	al al al al Al		_ 5 ×
Project	Dashboar	I (M700_Demo) × Help	≁ ‡ ×
 My Project 16 My Output 16 My My Output 16 My My M	The Com	shboard (M700_Demo) mands for working with a drive. Commands can also be found in the ribbon and by right-clicking no	
 Setup 	W708	Drive	
Diagnostics Diagnostics	000	5 a a a a a a a a a	
Block Diagrams	000	The linked Developed Connection Set mode Default Set Bename Reset State parameters	
Custom Lists	Drive Unidrive M700	from drive to drive settings and region parameters model in drive	
Macro Files	(Empty)	0	
	Slot 1	Change Emmana	
	(Empty)	ritindic	
		Setup & Diagnostics	
	(Empty) Slot 3	* 🕲 🖪 😫	
	-	Setup Diagnostics Parameter Block Liblings Diagrams	
		Parameters	
	Ethernet	Compare Compare with New Load parameter Upload Download	
		with file defaults parameter file file to a file file to drive	
		Parameter Help	
		0	
		Parameter Reference Guide	

In the drive Dashboard expand Setup and select 'Motor Setup':

Dashboard	I (M700_Demo) ×
	shboard (M700_Demo) mands for working with a drive. Commands can also be found in the ribbon and by right-clicking (
M700	Drive
000 Drive	Image: Contine Image: Content on drive Image: Content on drit Image: Content on drive Imag
(Empty) Slot 1	Change Firmware
(Empty) Slot 2	Setup & Diagnostics
(Empty) Slot 3	Setup Diagnostics Parameter Block Listings + Diagrams +
-	Notor Setup
Ethernet	Motor Feedback Setup Digital I/O Analog I/O New or Load parameter oprided Download
	Speed References
	Autotune
	Logic Function
	0 Motorized Pot



<u>Select 'Choose a motor', scroll down the list and select 067EDA300</u> <u>shown below and select 'OK':</u>

	tor Setup)		(- 🍁 :	Save to proj
Lincol	motor paramet	ters or cho	ose a mot	or from a li	IST			
Choose a moto	or 🔋 Save as custom	motor						
	_							
laximum Switch	hing Frequency 6	▼ kHz						
ercentage 😨	Motor database						_	
oltage He	lotor Database:	Servo	- 2	Remove cust	tom motor			
laximum F	lotor Database:	Servo	- 2	Remove cust	tom motor			
laximum f	Iotor Database:	Servo	Poles	Remove cust	tom motor Current (A)	Voltage (V)	Power (kW)	
Motor	Iotor Database: Custom Model 055EDA600	Servo	Poles	Remove cust Speed (rpm) 6000	Current (A)	Voltage (V) 220	Power (kW)	
Motor	Lustom Model 055EDA600 055EDB600	Servo	Poles 8 8 8	Remove cust Speed (rpm) 6000 6000	Current (A) 1.500 2.100	Voltage (V) 220 220	Power (kW) 0.40 0.60	-
Motor Rated Cur	Lustom Model 055EDA600 055EDB600 055EDC600	Servo	Poles 8 8 8 8	Remove cust Speed (rpm) 6000 6000 6000	Current (A) 1.500 2.100 2.500	Voltage (V) 220 220 220 220	Power (kW) 0.40 0.60 0.80	-
Aximum F Motor Rated Cur	Model 055EDA600 055ED600 055ED600 055ED600 067EDA300	Servo	Poles 8 8 8 8 10	Remove cust Speed (rpm) 6000 6000 6000 3000	Current (A) 1.500 2.100 2.500 1.500	Voltage (V) 220 220 220 220 220 220	Power (kW) 0.40 0.60 0.80 0.40 0.40	
Aximum F Motor Rated Cur Rated Spe	Model OSSEDA600 05SEDA600 05SED600 05SED600 05FED6300 067EDA300	Servo	Poles	Remove cust Speed (rpm) 6000 6000 6000 3000 3000	Current (A) 1.500 2.100 2.500 1.500 1.500	Voltage (V) 220 220 220 220 420	Power (kW) 0.40 0.60 0.80 0.40 0.80 0.40	
Aximum F Motor Rated Cur Rated Spe Rated Volt	Model Ossephene 055EDA600 055EDB600 055ED600 067EDA300 067UDB300 067UDA300	Servo	Poles 8 8 8 8 10 10 10	Remove cust Speed (rpm) 6000 6000 6000 3000 3000 3000	Current (A) 1.500 2.100 2.500 1.500 1.500 1.800	Voltage (V) 220 220 220 220 220 400 400	Power (kW) 0.40 0.60 0.80 0.40 0.40	
Aximum F Motor Rated Cur Rated Spe Rated Voli	Model OSSEDA600 05SEDA600 05SED600 05SEDC600 067/EDA300 067/UDA300 067/UDA300 067/UDA300	Servo	Poles 8 8 8 10 10 10 10 10 10	Speed (rpm) 6000 6000 6000 3000 3000 3000	Current (A) 1.500 2.100 2.500 1.500 1.500 1.800 2.200	Voltage (V) 220 220 220 400 400 400	Power (kW) 0.40 0.60 0.80 0.40 0.40 1.10	
Aximum F Motor Rated Cur Rated Spe Rated Voli	Model Ossephene Oss	Servo	Poles 8 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	Speed (rpm) 6000 6000 3000 3000 3000 3000	Current (A) 1.500 2.100 2.500 1.500 1.500 1.800 2.200 2.600	Voltage (V) 220 220 220 200 200 400 400 400 220	Power (kW) 0.40 0.60 0.80 0.40 0.80 0.40 0.80 0.40 0.80 0.40 0.80	-

Select 'Save to project' in the upper right hand corner to save the motor data to the project:

Dashboard (M700_Demo)	× Motor S	etup (M700_Demo) ×		
Motor Set	tup			Save to project
Enter motor para	ameters o	r choose a motor fron	n a list	
🥅 Choose a motor 😫 Save as o	ustom motor			
Maximum Switching Frequency	6 💌	kHz		
Percentage over current trip lev	el 100 💌	%		
Voltage Headroom	0 🌲	%		
Maximum Reference Clamp	3000.0 🌲	rpm		
Motor 1 Motor 2			4	
Rated Current	1.500 🗘	А		
Rated Speed	3000.00 🗘	rpm		
Rated Voltage	220 🗘	v		
Kt	0.93 🗘	Nm/A		
Ке	98 🌲	v		
Motor Thermal Time Constant	54.0 🗘	s		
Stator Resistance	8.051344 🗘	Ω		
Ld	27.643 🗘	mH		
No Load Lq	30.073 🗘	mH		
Lq at Defined Iq	0.000 ‡	mH		
Lq at Defined Id	0.000 🗘	mH		
Current Controller Kp Gain	320 🗘			
Current Controller Ki Gain	3991 🗘			
Number of Motor Poles	10 💌	Poles (5 pole pairs)		

CONTROL TECHNIQUES

7078 Shady Oak Road, Eden Prairie, MN 55344-3505 +1 952 995-8000 www.controltechniques.com



In the drive Dashboard expand 'Setup' and select 'Motor Feedback Setup':

Dashboar	d (M700_Demo) × Motor Setup (M700_Demo) ×
	shboard (M700_Demo) mands for working with a drive. Commands can also be found in the ribbon and by right-clicking n
M700	Drive
Drive	7 V V V V V V V V V V V V V V V V V V V
(Empty) Slot 1	Change
(Empty) Slot 2	Firmware Setup & Diagnostics
(Empty) Slot 3	Setup Diagnostics Parameter Block
	Motor Setup
Ethernet	Motor Feedback Setup Digital I/O Analog I/O Speed References Download field to free the feedback features of the drive.
	P. Ramps Setup Autotune
	Logic Function Motorized Pot Threshold Detector

Make the Drive P1 setup selections as shown below. Then select 'Save to project':

Dashboard (M70	00_Demo) × Motor Set	up (M700_Demo) ×	1otor Feedback Setup (M7	00_Demo) ×	*
Setup the	r Feedback	Setup ack configuration	parameters.	(Save to project
Motor feedback devic	e connected to: Drive P1	•	Drive feedback mode:	Position Feedback	<u> </u>
What type of en	ncoder is attached to th	e drive? otary O Linear			
Rotary EnDat co	rnfiguration: ✓ Enable wire break detec ← Enable phase error dete ← Enable SSI power suppl ← Disable trips {Enc 1} to	t ct y alarm bit monitor {Enc 7}			
Encoder setup:	Encoder supply voltage Auto Configuration Disable Rotary Turn Bits Comms Bits Comms Baud Rate	5v • e • on ° off 16 • 18 • 300k •			
Advanced Features	s: Additional power up delay Feedback Filter Normalisation Turns Feedback Reverse	Disabled ▼ 16 ↓ C On C Off			



<u>Select the 'Ethernet' icon below in the Drive dashboard. Expand 'Parameters'</u> and Select 'Menu 4.02 Ethernet : Configuration':

Dashboard	I (M700_Demo) ×
	shboard (M700_Demo) mands for working with a drive. Commands can also be found in the ribbon and by right-clicki
M/COTE	Operations
000	55 Default parameters 5 Reset
Drive Unidrive M700	Status
(Empty) Slot 1	IP address: 192.168.1.100 MAC address: Not available Gateway mode: Switch VLAN: Disabled
(Empty) Slot 2	Setup
(Empty) Slot 3	Parameters
=	Menu 4.02 : Ethernet Configuration
	Menu 4.09 : Resources Menu 4.02 : Ethernet Configuration
Ethernet	Menu 4.10 : Easy Mode Cyclic Data View parameters on the drive and option modules.
	Menu 4.15 : Modbus
	Menu 4.20 : EtherNet/IP Setup
	Menu 4.21 : EtherNet/IP In Mappings
	B Menu 4.22 : EtherNet/IP Out Mappings
	Menu 4.23 : EtherNet/IP Fault Values

Uncheck the box shown below to turn 'DHCP' Enable 'Off' in Pr 4.02.005:

Menu 4.02 : Ethernet Configuration View parameters on the drive and option modules.					
₽ Search.					
A 02 000	Caption	Categories	value	Source/Destination	
4.02.000	Notwork Status		U		
4 02 004	Network Message Count		0 Messages/s		
4 02 005	DHCP Enable		Off		
4.02.006	IP Address		192,168,1,100		
4.02.007	Subnet Mask		255 255 255 0		
4.02.008	Default Gateway		192,168,1,254		
4.02.009	Primary DNS		0.0.0.0		
4.02.010	Secondary DNS		0.0.0.0		
4.02.011	MAC Address		Not available		
4.02.020	Priority Protocol		None		
4.02.021	Web Server Enable		🔽 On		
4.02.022	Web Server Port		80		
4.02.024	Ethernet MTU		1500 Bytes		
4.02.025	Gateway Mode		Switch		
4.02.030	VLAN Enable		Off		
4.02.031	Drive VLAN ID		0		
4.02.035	Non cyclic enable		Off		
4.02.036	Non cyclic base parameter		0.00.000	Unassigned	



Select the 'Drive' Keypad Icon to go back to the Drive Dashboard and select 'Online':



Once successfully Online with the drive the drive name, IP address, and the Drive Dashboard will be highlighted in Green. The 'Online' button will be illuminated yellow as shown:

File Home View		
Add drive Project Devices	node Default S region parameters mo Drive	Image: Source parameters Image: Source p
Project	Dashboard	(My Drive) ×
My Project 16 M700_Demo (192.168.1.100) M Dashboard Stup Disascine	Comr	shboard (My Drive) mands for working with a drive. Commands can also be found in the ribbon and by right-clicking n Drive
Diagnosics D	Drive Unidrive M700 (Empty) Slot 1 (Empty)	Online Upbad Download Corriection Set mode Default Set Rename Reset Save parameters in drive Online Upbad Download Corriection Set mode Default Set Rename Reset Save parameters in drive Online Upbad Download Settings and region parameters model Rename Reset Save parameters in drive Online Connection Settings And region parameters model Rename Reset Save parameters Change Primware Finance Settings Setings Settings Se
	Slot 2	Setup & Diagnostics
	(Empty) Slot 3	Setup Diagnostics Parameter Diagrams -
		Parameters
	Ethernet	Correare with file Corpare with New Load parameter file Load parameter file to drive
		Parameter Help
		Parameter Reference Guide

CONTROL TECHNIQUES

7078 Shady Oak Road, Eden Prairie, MN 55344-3505 +1 952 995-8000 www.controltechniques.com



Select 'Download to drive' to download the project setup:

Project	Dashboard (My Drive) ×
 My Project 16 M700_Demo (192.168.1.100) Dashbaard 	Commands for working with a drive. Commands can also be found in the i
Cushboard Setup Diagnostics Parameters Block Diagrams Custom Lists Parameter Files Macro Files	Drive Drive Drive Unidrive M700 (Empty) Slot 1 (Empty) Slot 2 Setup & Diagnostics
	Stat 3 Setup Diagnostics Parameter Block Setup Diagnostics Parameter Block Listings + Block Diagnostics Block Ethernet Image: Compare with defaults Parameter Help Image: Compare with defaults Image: Compare with defaults.

When prompted to 'Overwrite drive parameters?' select 'Yes':

File Home View			
Add drive Project Devices	node Default Set Rename Reset Save parameters in drive	Tools & Wizards Tools & Wizards Parameter Listings Block Diagrams Setup & Diagnostics	Compare with New Load defaults. Parameters
Project	Dashboard (M700_Demo) ×		
 M700 Basic Demo M700_Demo (192.168.1.100) 1 Dashboard Setup Diagnostics 	Commands for working with a	Demo) drive. Commands	can also be found in the ribbo
 Diagnostics Parameters Block Diagrams Custom Lists Parameter Files Macro Files 	Drive Unidrive M700 Image: Control of the control	Connection Set mode ownload to drive Overwrite drive pa Yes Parameter Listings + Block Diagrams +	Default Set Rename Re model



In the Drive dashboard expand 'Setup' and select 'Autotune':



For best results select type '2. Rotating'. Then select 'Next':

Dashboard (M700 dem	10) × Autotune (M700 demo) ×				-
Wizard for au	1e utomatically tur	ning drive to m	otor for	optimal res	ults	O Live
_	Configuration	Preconditions	Run	Results	🕞 Ва	ck 🕣 Next
Configuration –						\smile
Please ensure that deliver considerate taken precautions then the coupling the motor.	it you have read the ole torque into any to prevent injury of and other mechan	e safety informatio mechanism couple or danger to life. Yo ical arrangements	n in the dr d to the m ou should a are capabl	ive user guide otor. You shou also satisfy you e of withstand	Autotuning may cause the moto ild be sure before proceeding tha irself that if a load is connected t ing the full continuous and overlo	or to rotate and it you have to the motor oad torque of
Motor Setup —						
If you haven't configured th	e motor parameters	yet, click the button	(s) below to	o open the relev	vant tool(s) before attempting an au	totune.
Motor Setup	Motor Feedb	ack Setup				
Autotune tests Select autotune test. Choos	e stationary test if yo	ou are unsure wheth	er motor ca	in be safely rota	ited.	
Which type of autotur	e test should be use	ed?				
01.0						
© 2. Rotating						
A The unit with	and mus	t he able to rotate f	reelv			
			iccii)			
Direction of rota	tion					
Which direction of mo	tor rotation should	be used for tuning?				
Forward						
C Reverse						
Motor Paramete	r Set					
Which set of motor pa	rameters should be	updated by autotu	ning?			
Motor 1 (men	u 5)					
C Motor 2 (mer	1u 21)					



At this point it is optional to select 'Save parameters in drive'. Then select 'Next'.

Dashboard (M700 den	10) × Autotune	(M700 demo) ×			•
Wizard for a	1e utomatically to	uning drive to m	otor for	optimal resu	Its
_	Configuration	Preconditions	Run	Results	🕞 lack 🕞 Next
Preconditions -					
✓ Configuration	summary				
Drive status —					
Autotuning can co	ntinue: click 'Next	' to open the Run pa	ge		
Save parameter Provides the option to save autotuning pales under the option of the option autotuning pales of the option Save parameter	S all parameters to o ble changes. rs in drive	drive memory before s	starting auto	tune. This may b	e ignored, but it is a useful safeguard in case

Follow the Online prompt and activate drive enable (T31) to begin the rotating Autotune:

Dashboard (M700 demo) × Autotune (M700 demo) ×
Wizard for automatically tuning drive to motor for optimal results
Configuration Preconditions Run Results G Back 🕢 Next
Run
Configuration summary
Drive Enable
\Rightarrow To start the autotune please enable the drive by activating the drive enable or Safe Torque Off input(s).
Autotune progress
Not started (awaiting enable)
(1) Autotune is likely to take between 3 and 60 seconds, depending on the selected configuration. The maximum duration allowed is 120 seconds: if at

Below is Autotune in progress:

Below is Autotune complete

Dashboard (M700 demo) x Autotune (M700 demo) x	Dashboard (H700 demo) × Autotune (H700 demo) ×
Wigard for automatically tuning drive to motor for optimal results	Wizard for automatically tuning drive to motor for optimal results
Configuration Preconditions Run Actuality Configurations Run Actuality Configuration Preconditions Run Actuality Configurations Run Actuality Run Actuality Configurations Run Actualit	Configuration Preconditions Run Assults 😜 Back 🌍 Next Run 💌 Configuration summary Divisive Emplais
Configuration nummary Drive Enable	
Autotune progress	Not started (walking enable) In progress Firstand (awalking disable)
Not started (availing enable)	Finished Time elapset: 35.9 s
Time elapsed: 30.6 s It is the state of the seconds, depending on the selected configuration. The maximum duration allowed is 120 seconds: if a:	Australia to Constants Click Teach to your the results Click Teach to the Preconditions page and re-run the autotune



Select 'Next' to view the changed parameters in the drive as a result of performing a rotating Autotune. Select 'Save parameters in drive' to save the parameter changes:

Wizard	for automatically tuning drive t	to motor	for optim	al res	ults						0
	Configuration Preconditions	s Run	Resul	ts					Ð	Back	6
esults —									_		
✓ Config	guration summary										
nichod —											
maneu											
Autotune has fir	hished and amended the parameters listed belo	w.									
-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n click 'Back	' twice to retur	n to the	Conf					10 AL	
If you wish to re proceed as befo	e-run the autotune with a different configuratio re.	II, CIICK DOCK		in to the	0011	guratio	n page	e, cnar	ige the o	ptions tr	nere then
If you wish to re proceed as befo	e-run the autotune with a different configuratio re.	I, CICK DOCK		in to the	0011	guratio	n pays	e, char	ige the o	ptions tr	here then
If you wish to re proceed as befo	e-run the autotune with a different configuratio re.	ata tha daiw				guratio	n page	e, char	ige the o	ptions tr	here then
If you wish to re proceed as before ave parameter you are happy with your the drive drive	e-run the autotune with a different configuration re. Ieters Ith the results it is advised you save them in	nto the drive	e's non-volati	le memo	ory of	guratio herwis	e the	e, char settin	ige the o gs may	ptions tr	when you
If you wish to re proceed as befor ave param rou are happy wi wer the drive do	e-run the autotune with a different configuration re. Ieters Ith the results it is advised you save them in	nto the drive	e's non-volatil	e memo	ory of	guratio	e the	settin	ge the o gs may	ptions tr	when you
If you wish to re proceed as before ave parameters you are happy with wer the drive de	e-run the autotune with a different configuration re.	nto the drive	e's non-volati	e memo	ory of	herwis	e the	settin	ige the o gs may	ptions tr	when you
If you wish to re proceed as before ave parameter you are happy will wer the drive do save p	Provinting a different configuration re.	nto the drive	e's non-volatil	e memo	ory of	herwis	e the	settin	ge the o gs may	be lost i	when you
If you wish to re proceed as before ave parameters out are happy will were the drive to save p Save p	Prun the autotune with a different configuration re. Interes Ith the results it is advised you save them in managemeters in drive	nto the drive	e's non-volatil	e memo	ory of	herwis	e the	settin	ge the o gs may	be lost i	when you
If you wish to re proceed as before ave parameters out are happy will were the drive do Save p Save p hanged parameters	Prun the autotune with a different configuration re. Teters th the results it is advised you save them in parameters in drive	nto the drive	ə's non-volatil	e memo	ory of	herwis	e the	settin	ge the o gs may	be lost t	when you
If you wish to re proceed as before ave parameters out are happy will were the drive do save p save p hanged parameters	Provin the autotune with a different configuration re. Teters th the results it is advised you save them in parameters in drive	nto the drive	e's non-volati	e memo	ory of	herwis	e the	settin	ge the o	be lost t	when you
If you wish to re proceed as before the parameter ou are happy we were the drive do save p anged parameter	The first of the autotune with a different configuration re.	nto the drive Old value	a's non-volati	e memo Units	bry of	herwis	e the	settin	ge the o	be lost t	when you
If you wish to re proceed as before the drive day were the drive day save proceed as before the drive day save proceed as before anged parameter (03.025)	Provintine autorune with a different configuration re.	Old value 242.3	New value 241.5	e memo Units	bry of	herwis	e the	settin	gs may	be lost t	when you
If you wish to re proceed as before the drive the drive the save parameter Save parameter Save parameter Danged parameter [03.025 [04.013]	Point the autotune with a different configuration re. Ieters Ith the results it is advised you save them in Darameters in drive ITAMETERS Caption Position Feedback Phase Angle Current Controller Kp Gain	Old value 242.3 323	New value 241.5 327	e memo Units	ory of	herwis	e the	settin	gs may	be lost t	when you
If you wish to re proceed as before the parameter ou are happy we were the drive the save parameter anged parameter 03.025 04.013 04.014	Provintine autorune with a different configuration re. Interest in the results it is advised you save them in the results it is advised you save them in the results in drive the same term in the same term is advised you save the same term in the same term is advised you save the same term in the same term is advised you save the same term in the same term is advised you save the same term in the same term is advised you save the same term in the same term is advised you save term is advised you save the same term is advised you save term is advised you save the same term is advised you save term is advised you	Old value 242.3 323 3856	New value 241.5 327 3781	e memo		herwis	e the	settin	gs may	be lost t	when you
If you wish to re proceed as before ou are happy will were the drive to save p anged parameter 03.025 04.013 04.014 05.017	Provintine autorune with a different configuration re. Interes Ith the results it is advised you save them in Darameters in drive Interes Caption Position Feedback Phase Angle Current Controller Kp Gain Current Controller Ki Gain Stator Resistance	Old value 242.3 3856 7.779312	New value 2415 327 3781 7.627780	Units		herwis	e the	settin	gs may	be lost t	when you
If you wish to re proceed as befor ou are happy wiver the drive to save p anged parameter 03.025 04.013 04.014 05.017 05.024	Provintine autorune with a different configuration re. Interes Ith the results it is advised you save them in Darameters in drive Interes Caption Position Feedback Phase Angle Current Controller Kp Gain Current Controller Ki Gain Stator Resistance Ld	Old value 242.3 323 3856 7.779312 27.840	New value 241.5 327 3781 7.627780 28.234	Units		herwis	e the	settin	gs may	be lost t	when you
If you wish to re proceed as before ou are happy wiver the drive to save p anged parameter 03.025 04.013 04.014 05.027 05.024 05.024 05.060	Province autorune with a different configuration re. Interest of the source of the so	Old value 242.3 323 3856 7.779312 27.840 1.44	New value 241.5 327 3781 7.627780 28.234 1.56	Units Ω MH %		herwis	e the	e, char	gs may	be lost t	when you
If you wish to reproceed as before ave parameter out are happy were the drive the drine drive the drine the drive the drive the drive the drive the dri	Provintine autorune with a different configuration re. Ieters Ith the results it is advised you save them in Darameters in drive ITAMETERS Caption Position Feedback Phase Angle Current Controller Kp Gain Current Controller Kp Gain Stator Resistance Ld Current At Maximum Deadtime Compensation No-load Ln	Old value 242.3 323 3856 7.779312 27.840 1.44 31.058	New value 241.5 327 3781 7.627780 28.234 1.56 29.613	Units ο Ω mH %		herwis	e the	settin	gs may	be lost	when you

At this point all of the changes made from performing the Autotune are saved in the drive, however, these changes do not reside in the MConnect project. While the drive is still Online go back to the Drive dashboard and select 'Upload from drive'.





Once the parameter changes have been uploaded go Offline and Select File 'Save project as' and enter a file name to save the project as a backup file or for future use:

File			
	New project	Recent Documents	
	Tien project	1 M700 Basic Demo	-[=]
2	Open	2 My Project 16	-[=]
		3 My Project 13	-[=]
	Save project as	4 My Project 15	-(=)
		5 My Project 14	-[=]
	Close project	Saves project with a new name	-[=]
	Fiese hielest	7 My Project 11	-(=)

The demo can now be enabled by activating the Drive Enable (T31). Then either Run Forward (T26) or Run Reverse (T25) can be activated and the demo Analog potentiometer turned from full CCW (zero speed) to full CW (full motor speed) in the direction selected, and will provide the required analog speed command.

Resources: can be found on our website: <u>www.controltechniques.com</u> For help contact techsupport.cta@mail.nidec.com, or call Technical Support at 952-995-8000, 24/7/365

CONTROL TECHNIQUES

7078 Shady Oak Road, Eden Prairie, MN 55344-3505 +1 952 995-8000 www.controltechniques.com