

FB111 - <offline>

"FB_T111"

Name:

Family:

Author: Hlozek

Version: 0.1

Block version: 2

Time stamp Code: 05/26/2009 02:41:40 PM

Interface: 04/13/2009 12:13:03 PM

Lengths (block/logic/data): 03494 02772 00112

Name	Data Type	Address	Initial Value	Comment
IN		0.0		
Vstupni_adresa	Int	0.0	256	Vstupni adresa
Vystupni_adresa	Int	2.0	256	Vystupni adresa
ONOFF1	Bool	4.0	FALSE	ON/OFF1
OFF2	Bool	4.1	TRUE	OFF2
OFF3	Bool	4.2	TRUE	OFF3
Enable_operation	Bool	4.3	TRUE	Enable operation
EPOS_reject	Bool	4.4	FALSE	EPOS reject traversing task
EPOS_stop	Bool	4.5	FALSE	EPOS intermediate stop
EPOS_activate	Bool	4.6	FALSE	EPOS activate traversing task
Ack_fault	Bool	4.7	FALSE	Acknowledge faults
EPOS_jog_1	Bool	5.0	FALSE	EPOS jog 1 signal source
EPOS_jog_2	Bool	5.1	FALSE	EPOS jog 2 signal source
Master_PLC	Bool	5.2	TRUE	Master ctrl by PLC
EPOS_start	Bool	5.3	FALSE	EPOS referencing start
EPOS_bit_0	Bool	5.4	FALSE	EPOS traversing block selection, bit 0
EPOS_bit_1	Bool	5.5	FALSE	EPOS traversing block selection, bit 1

Name	Data Type	Address	Initial Value	Comment
EPOS_bit_2	Bool	5.6	FALSE	EPOS traversing block selection, bit 2
EPOS_bit_3	Bool	5.7	FALSE	EPOS traversing block selection, bit 3
EPOS_bit_4	Bool	6.0	FALSE	EPOS traversing block selection, bit 4
EPOS_bit_5	Bool	6.1	FALSE	EPOS traversing block selection, bit 5
EPOS_pos_type	Bool	6.2	FALSE	EPOS direct setpoint input/MDI positioning type
EPOS_dir_positive	Bool	6.3	FALSE	EPOS direct setpoint input/MDI direction selection, positive
EPOS_dir_negative	Bool	6.4	FALSE	EPOS direct setpoint input/MDI direction selection, negative
EPOS_trans_type	Bool	6.5	FALSE	EPOS direct setpoint input/MDI transfer type selection
EPOS_acc_edge	Bool	6.6	FALSE	EPOS direct setpoint input/MDI setpoint acceptance edge
EPOS_sett_up	Bool	6.7	FALSE	EPOS direct setpoint input/MDI setting-up selection
EPOS_direct	Bool	7.0	FALSE	EPOS direct setpoint input/MDI selection

Name	Data Type	Address	Initial Value	Comment
EPOS_tracking	Bool	7.1	FALSE	EPOS select tracking mode
EPOS_set	Bool	7.2	FALSE	EPOS set reference point
EPOS_search	Bool	7.3	FALSE	EPOS search for reference, reference cam
EPOS_increment	Bool	7.4	FALSE	EPOS jogging incremental
EPOS_ref_type	Bool	7.5	FALSE	EPOS referencing type selection
EPOS_start_dir	Bool	7.6	FALSE	EPOS search for reference, start direction
LR_sel_meas	Bool	7.7	FALSE	LR selecting measuring probe evaluation, Closed-loop position control
LR_meas_edge	Bool	8.0	FALSE	LR measuring probe evaluation edge, Closed-loop position control
EPOS_SW_limit	Bool	8.1	FALSE	EPOS software limit switch activation
EPOS_STOP_cam	Bool	8.2	FALSE	EPOS STOP cam activation
DDS_bit_0	Bool	8.3	FALSE	Drive data set selection DDS bit 0
DDS_bit_1	Bool	8.4	FALSE	Drive data set selection DDS bit 1
DDS_bit_2	Bool	8.5	FALSE	Drive data set selection DDS bit 2
DDS_bit_3	Bool	8.6	FALSE	Drive data set selection DDS bit 3
DDS_bit_4	Bool	8.7	FALSE	Drive data set selection DDS bit 4
Parking_axes	Bool	9.0	FALSE	Parking axes selection

Name	Data Type	Address	Initial Value	Comment
Activate_travel	Bool	9.1	FALSE	Activates travel to a fixed stop
Motor_changeover_1	Bool	9.2	FALSE	Motor changeover, feedback signal
Master_bit_0	Bool	9.3	FALSE	Master sign of life bit 0
Master_bit_1	Bool	9.4	FALSE	Master sign of life bit 1
Master_bit_2	Bool	9.5	FALSE	Master sign of life bit 2
Master_bit_3	Bool	9.6	FALSE	Master sign of life bit 3
Velocity_override	Real	10.0	0.000000e+000	Override pro rychlost (100 = 100%)
Target_position_IN	DInt	14.0	L#0	Vzdalenost k ujetí (v LU)
Velocity	Real	18.0	0.000000e+000	Rychlost menice v nasobcích 1000 LU/min (p2571)
Acc_override	Real	22.0	0.000000e+000	Override pro zrychlení
Dec_override	Real	26.0	0.000000e+000	Override pro zpomalení
OUT		0.0		
Ready_for_switch_on	Bool	30.0	FALSE	Ready for switching on (1=ne, 0=ano)
Ready_for_operation	Bool	30.1	FALSE	Ready for operation
Operation_enabled	Bool	30.2	FALSE	Operation enabled
Fault_present	Bool	30.3	FALSE	Fault present
No_coasting_active	Bool	30.4	FALSE	No coasting active (1=OFF2 aktivní, 0=OFF2 neaktivní)
No_Quick_stop_active	Bool	30.5	FALSE	No Quick Stop active (1=OFF3 aktivní, 0=OFF3 neaktivní)
Switching_on_inhibit	Bool	30.6	FALSE	Switching on inhibit active
Alarm_present	Bool	30.7	FALSE	Alarm present

Name	Data Type	Address	Initial Value	Comment
Error_in_tolerance	Bool	31.0	FALSE	Following error in tolerance
Control_requested	Bool	31.1	FALSE	Control requested (1=ne, 0=ano)
Target_position	Bool	31.2	FALSE	Target position reached
Reference_point_set	Bool	31.3	FALSE	Reference point set
Traversing_activated	Bool	31.4	FALSE	Acknowledgement, traversing block activated
n_act_speed_threshold_1	Bool	31.5	FALSE	n_act < speed threshold value 3
Axis_acc	Bool	31.6	FALSE	Axis accelerating
Axis_dec	Bool	31.7	FALSE	Axis decelerating
Traversing_bit_0	Bool	32.0	FALSE	Active traversing block, bit 0
Traversing_bit_1	Bool	32.1	FALSE	Active traversing block, bit 1
Traversing_bit_2	Bool	32.2	FALSE	Active traversing block, bit 2
Traversing_bit_3	Bool	32.3	FALSE	Active traversing block, bit 3
Traversing_bit_4	Bool	32.4	FALSE	Active traversing block, bit 4
Traversing_bit_5	Bool	32.5	FALSE	Active traversing block, bit 5
STOP_cam_minus	Bool	32.6	FALSE	STOP cam minus active
STOP_cam_plus	Bool	32.7	FALSE	STOP cam plus active
Bit_0	Bool	33.0	FALSE	Bit 0
Bit_1	Bool	33.1	FALSE	Bit 1
Flying_ref	Bool	33.2	FALSE	Flying reference active
Bit_2	Bool	33.3	FALSE	Bit 2
Bit_4	Bool	33.4	FALSE	Bit_4

Name	Data Type	Address	Initial Value	Comment
MDI_active	Bool	33.5	FALSE	MDI active
Tracking_mode	Bool	33.6	FALSE	Tracking mode active
Velocity_limiting	Bool	33.7	FALSE	Velocity limiting active
Setpoint_available	Bool	34.0	FALSE	Setpoint available
Printing_mark	Bool	34.1	FALSE	Printing mark outside outer window
Axis_moves_forwards	Bool	34.2	FALSE	Axis moves forwards
Axis_moves_backwards	Bool	34.3	FALSE	Axis moves backwards
SW_limit_minus	Bool	34.4	FALSE	Software limit switch minus reached
SW_limit_plus	Bool	34.5	FALSE	Software limit switch plus reached
Cam_switch_pos_1	Bool	34.6	FALSE	Position actual value <= cam switching position 1
Cam_switch_pos_2	Bool	34.7	FALSE	Position actual value <= cam switching position 2
Direct_output_1	Bool	35.0	FALSE	Direct output 1 via traversing block
Direct_output_2	Bool	35.1	FALSE	Direct output 2 via traversing block
Fixed_stop_reached	Bool	35.2	FALSE	Fixed stop reached
Fixed_stop_clamping	Bool	35.3	FALSE	Fixed stop clamping torque reached
Travel_to_fixed_stop_1	Bool	35.4	FALSE	Travel to fixed stop active
Traversing_command	Bool	35.5	FALSE	Traversing command active
DDS_eff_bit_0	Bool	35.6	FALSE	DDS eff., bit 0
DDS_eff_bit_1	Bool	35.7	FALSE	DDS eff., bit 1

Name	Data Type	Address	Initial Value	Comment
DDS_eff_bit_2	Bool	36.0	FALSE	DDS eff., bit 2
DDS_eff_bit_3	Bool	36.1	FALSE	DDS eff., bit 3
DDS_eff_bit_4	Bool	36.2	FALSE	DDS eff., bit 4
Alarm_bit_0	Bool	36.3	FALSE	Alarm class bit 0 (1=high, 0=low)
Speed_contr_set	Bool	36.4	FALSE	Speed controller set integrator value
Parking_axes_active	Bool	36.5	FALSE	Parking axis active
Travel_to_fixed_stop_2	Bool	36.6	FALSE	Travel to fixed stop active
Pulses_enabled_1	Bool	36.7	FALSE	Pulses enabled
Motor_changeover_2	Bool	37.0	FALSE	Motor changeover active
Slave_bit_0	Bool	37.1	FALSE	Slave sign of life bit 0
Slave_bit_1	Bool	37.2	FALSE	Slave sign of life bit 1
Slave_bit_2	Bool	37.3	FALSE	Slave sign of life bit 2
Slave_bit_3	Bool	37.4	FALSE	Slave sign of life bit 3
Ramp_completed	Bool	37.5	FALSE	Ramp-up/ramp-down completed
Torque_utilization	Bool	37.6	FALSE	Torque utilization < torque threshold value 2
n_act_speed_thresh_val_3	Bool	37.7	FALSE	n_act < speed threshold value 3
n_act_speed_thresh_val_2	Bool	38.0	FALSE	n_act <= speed threshold value 2
Alarm_motor_overtemp	Bool	38.1	FALSE	Alarm motor overtemperature (1=ne, 0=ano)
Alarm_pwr_unit_temp	Bool	38.2	FALSE	Alarm power unit thermal overload (1=ne, 0=ano)

Name	Data Type	Address	Initial Value	Comment
Speed_deviation	Bool	38.3	FALSE	Speed setp - act val deviation in tolerance t_on
Controller_enable	Bool	38.4	FALSE	Controller enable
Drive_ready	Bool	38.5	FALSE	Drive ready
Pulses_enabled_2	Bool	38.6	FALSE	Pulses enabled
Fault_0	Bool	38.7	FALSE	Fault code bit 0
Fault_1	Bool	39.0	FALSE	Fault code bit 1
Fault_2	Bool	39.1	FALSE	Fault code bit 2
Fault_3	Bool	39.2	FALSE	Fault code bit 3
Fault_4	Bool	39.3	FALSE	Fault code bit 4
Fault_5	Bool	39.4	FALSE	Fault code bit 5
Fault_6	Bool	39.5	FALSE	Fault code bit 6
Fault_7	Bool	39.6	FALSE	Fault code bit 7
Fault_8	Bool	39.7	FALSE	Fault code bit 8
Fault_9	Bool	40.0	FALSE	Fault code bit 9
Fault_10	Bool	40.1	FALSE	Fault code bit 10
Fault_11	Bool	40.2	FALSE	Fault code bit 11
Fault_12	Bool	40.3	FALSE	Fault code bit 12
Fault_13	Bool	40.4	FALSE	Fault code bit 13
Fault_14	Bool	40.5	FALSE	Fault code bit 14
Fault_15	Bool	40.6	FALSE	Fault code bit 15
Warn_0	Bool	40.7	FALSE	Alarm code bit 0
Warn_1	Bool	41.0	FALSE	Alarm code bit 1
Warn_2	Bool	41.1	FALSE	Alarm code bit 2
Warn_3	Bool	41.2	FALSE	Alarm code bit 3
Warn_4	Bool	41.3	FALSE	Alarm code bit 4

Name	Data Type	Address	Initial Value	Comment
Warn_5	Bool	41.4	FALSE	Alarm code bit 5
Warn_6	Bool	41.5	FALSE	Alarm code bit 6
Warn_7	Bool	41.6	FALSE	Alarm code bit 7
Warn_8	Bool	41.7	FALSE	Alarm code bit 8
Warn_9	Bool	42.0	FALSE	Alarm code bit 9
Warn_10	Bool	42.1	FALSE	Alarm code bit 10
Warn_11	Bool	42.2	FALSE	Alarm code bit 11
Warn_12	Bool	42.3	FALSE	Alarm code bit 12
Warn_13	Bool	42.4	FALSE	Alarm code bit 13
Warn_14	Bool	42.5	FALSE	Alarm code bit 14
Warn_15	Bool	42.6	FALSE	Alarm code bit 15
Ret_val_SFC14	Word	44.0	W#16#0	Navratova hodnota pri ctení dat z menice (0=OK)
Ret_val_SFC15	Word	46.0	W#16#0	Navratova hodnota pri zapisu dat do menice (0=OK)
Actual_position	DInt	48.0	L#0	Aktualni poloha v LU
Actual_speed	Real	52.0	0.000000e+000	Aktualni rychlost v ot/min
IN_OUT		0.0		
STAT		0.0		
Adresa_SFC14	Word	56.0	W#16#0	Adresa pro ctení zadana uzivatelem
Adresa_SFC15	Word	58.0	W#16#0	Adresa pro zapis zadana uzivatelem
Zesileni_override	Real	60.0	1.638400e+002	163.84 , je stejne pro vsechny override
Speed_const	Real	64.0	1.500000e-003	Konstanta pro prevod aktualni rychlosti

Name	Data Type	Address	Initial Value	Comment
Identifikace	Int	68.0	111	Cislo telegramu pro identifikaci
TEMP		0.0		
ZSW1	Array [0..15] Of Bool	0.0		Status word 1
POS_ZSW_1	Array [0..15] Of Bool	2.0		EPOS status word 1
POS_ZSW_2	Array [0..15] Of Bool	4.0		EPOS status word 2
ZSW2	Array [0..15] Of Bool	6.0		Status word 2
MELDW	Array [0..15] Of Bool	8.0		Message word
XIST_A	DWord	10.0		Position actual value A
NIST_B	DWord	14.0		Speed setpoint B (32bit)
FAULT_CODE	Array [0..15] Of Bool	18.0		Fault code
WARN_CODE	Array [0..15] Of Bool	20.0		Alarm code
FREE_2	Array [0..15] Of Bool	22.0		This word can be freely connected
STW1	Array [0..15] Of Bool	24.0		Control word 1
POS_STW_1	Array [0..15] Of Bool	26.0		EPOS control word 1
POS_STW_2	Array [0..15] Of Bool	28.0		EPOS control word 2
STW2	Array [0..15] Of Bool	30.0		Control word 2
OVERRIDE	Word	32.0		EPOS velocity override
MDI_TARPOS	DWord	34.0		MDI position
MDI_VELOC	DWord	38.0		MDI velocity
MDI_ACC	Word	42.0		MDI acceleration override
MDI_DEC	Word	44.0		MDI decelartion override
FREE_1	Array [0..15] Of Bool	46.0		This word can be freely connected
Return_SFC14	Int	48.0		Navratova hodnota SFC14
Return_SFC15	Int	50.0		Navratova hodnota SFC15
VelOver_Real	Real	52.0		Zadany override pro rychlost v Real

Name	Data Type	Address	Initial Value	Comment
VelOver_DInt	DInt	56.0		Zadany override pro rychlost v Double Int
Vzdalenost	DInt	60.0		Pomocna promenna pro Target_position_IN
Velocity_Real	Real	64.0		Rychlost v Real
Velocity_DInt	DInt	68.0		Rychlost v Double Int
AccOver_Real	Real	72.0		Override pro zrychleni v Real
AccOver_DInt	DInt	76.0		Override pro zrychleni v Double Int
DecOver_Real	Real	80.0		Override pro zpomaleni v Real
DecOver_DInt	DInt	84.0		Override pro zpomaleni v Double Int
Speed_Real	Real	88.0		Aktualni rychlost v Real
Warning_array	Array [0..15] Of Bool	92.0		Pole varovnych hlaseni

Block: FB111 FB pro ovladani frekv. menicu Sinamics pomoci telegramu 111

Autor: Vojtech Hlozek
Verze: 1.0
Datum: 15.2.2009

Pri pouziti tohoto FB je nutne, aby byly v CPU nahrany SFC14 a SFC15!

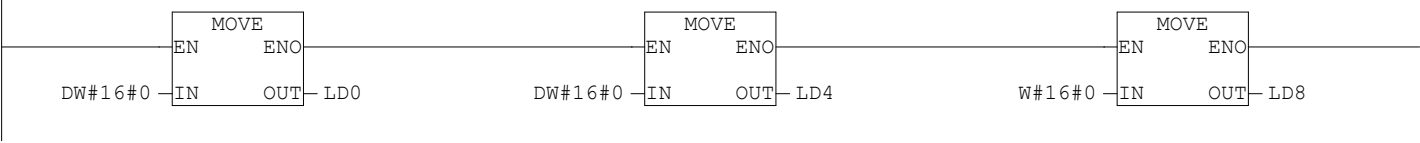
Tento telegram ma u prijimane a vysilane casti po jednom volnem slove - jedna se o slova FREE_1 a FREE_2 (preddefinovane jako Array [0..15] Of Bool).

V poli Warning_array je vyuzito 7 bitu (0. - 6.) ze 16. Lze tedy dle potreby zbyte bity pouzit pro vlastni varovna hlaseni.

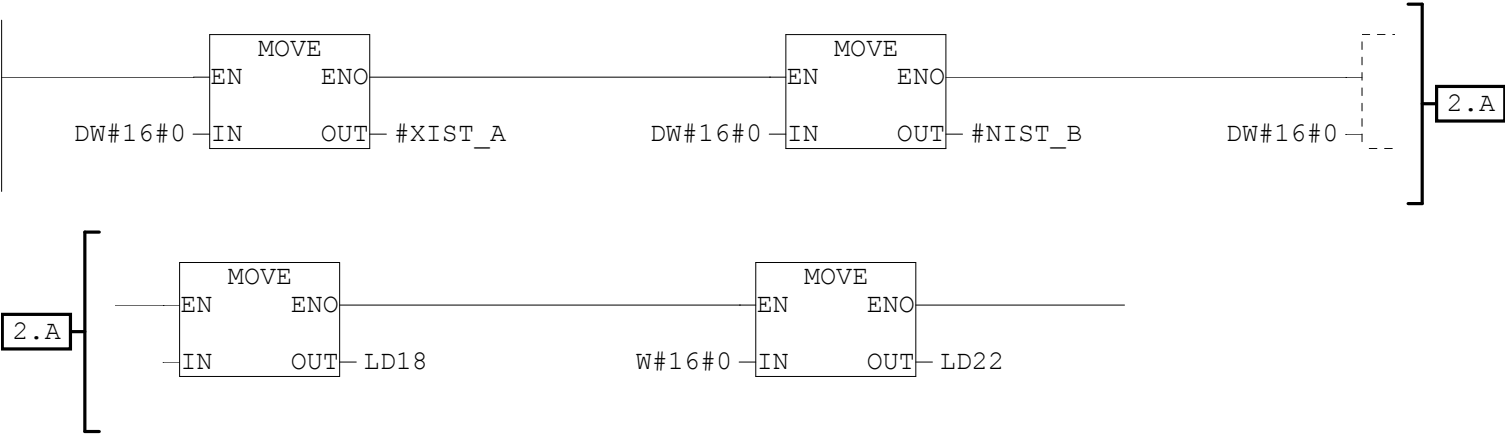
Legenda k Warning_array:

- 0.bit - chyba pri cteni dat z menice
- 1.bit - chyba pri zapisu dat do menice
- 2.bit - Velocity_override zadano mimo rozsah (hodnota je ale osetrena)
- 3.bit - Target_position_IN zadano mimo rozsah (hodnota je ale osetrena)
- 4.bit - Velocity zadano mimo rozsah (hodnota je ale osetrena)
- 5.bit - Acc_override zadano mimo rozsah (hodnota je ale osetrena)
- 6.bit - Dec_override zadano mimo rozsah (hodnota je ale osetrena)

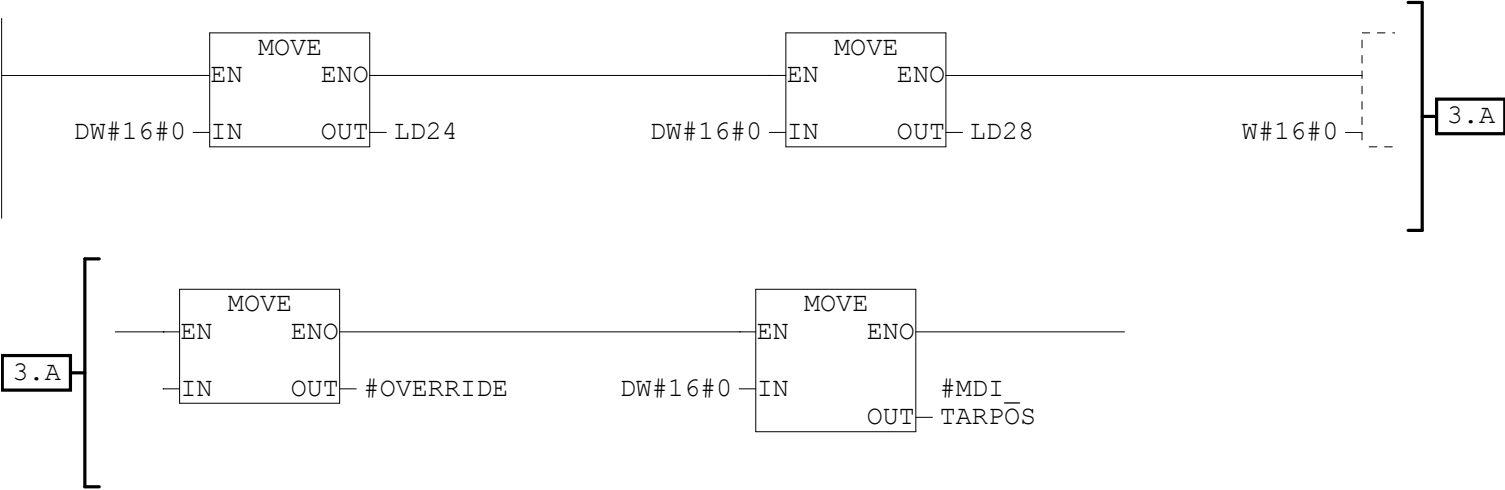
Network: 1 Vyprazdneni TEMP pro telegram jdouci z menice do CPU (12 wrd) 1.



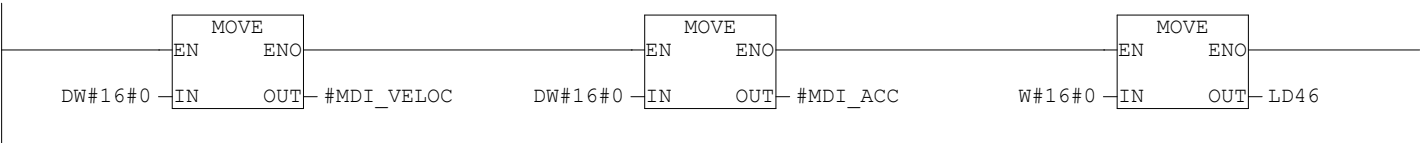
Network: 2 Vyprazdneni TEMP pro telegram jdouci z menice do CPU (12 wrd) 2.



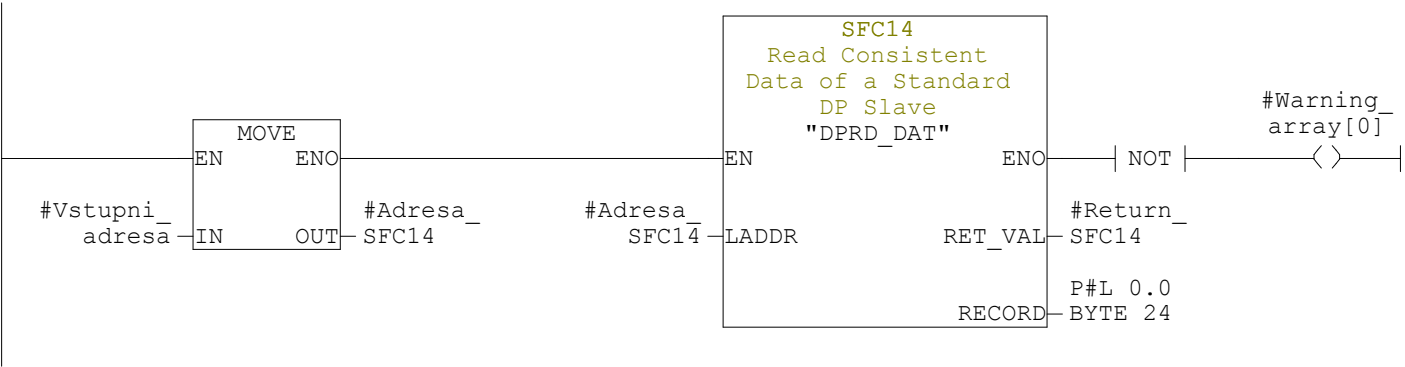
Network: 3 Vyprazdneni TEMP pro telegram jdouci z CPU do menice (12 wrd) 1.



Network: 4 Vyprazdneni TEMP pro telegram jdouci z CPU do menice (12 wrd) 2.

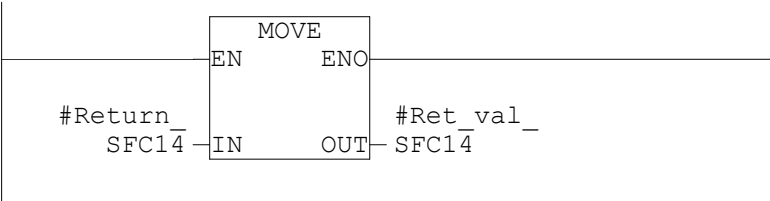


Network: 5 Nacteni dat z menice do CPU (TEMP)



Network: 6 Presun navratove hodnoty SFC14 (cteni dat z menice) na vystup

OUT je 0 = presun v poradku, hexa cislo = cislo chyby



Network: 7 Presun stavovych slov (ZSW1 a ZSW2) na vystup

```
A      #ZSW1[8]
=      #Ready_for_switch_on

A      #ZSW1[9]
=      #Ready_for_operation

A      #ZSW1[10]
=      #Operation_enabled

A      #ZSW1[11]
=      #Fault_present

A      #ZSW1[12]
=      #No_coasting_active
```

```
A      #ZSW1[13]
=      #No_Quick_stop_active

A      #ZSW1[14]
=      #Switching_on_inhibit

A      #ZSW1[15]
=      #Alarm_present

A      #ZSW1[0]
=      #Error_in_tolerance

A      #ZSW1[1]
=      #Control_requested

A      #ZSW1[2]
=      #Target_position

A      #ZSW1[3]
=      #Reference_point_set

A      #ZSW1[4]
=      #Traversing_activated

A      #ZSW1[5]
=      #n_act_speed_threshold_1

A      #ZSW1[6]
=      #Axis_acc

A      #ZSW1[7]
=      #Axis_dec


A      #ZSW2[8]
=      #DDS_eff_bit_0

A      #ZSW2[9]
=      #DDS_eff_bit_1

A      #ZSW2[10]
=      #DDS_eff_bit_2

A      #ZSW2[11]
=      #DDS_eff_bit_3

A      #ZSW2[12]
=      #DDS_eff_bit_4

A      #ZSW2[13]
=      #Alarm_bit_0

A      #ZSW2[14]
=      #Speed_contr_set

A      #ZSW2[15]
=      #Parking_axes_active

A      #ZSW2[0]
=      #Travel_to_fixed_stop_2
```

// u ZSW2 je 9. bit (ZSW2[1]) rezervni

```
A      #ZSW2[2]
=      #Pulses_enabled_1

A      #ZSW2[3]
=      #Motor_changeover_2

A      #ZSW2[4]
=      #Slave_bit_0

A      #ZSW2[5]
=      #Slave_bit_1

A      #ZSW2[6]
=      #Slave_bit_2

A      #ZSW2[7]
=      #Slave_bit_3
```

Network: 8	Presun slova POS_ZSW_1 (EPOS status word 1) na vystup
------------	---

```
A      #POS_ZSW_1[8]
=      #Traversing_bit_0

A      #POS_ZSW_1[9]
=      #Traversing_bit_1

A      #POS_ZSW_1[10]
=      #Traversing_bit_2

A      #POS_ZSW_1[11]
=      #Traversing_bit_3

A      #POS_ZSW_1[12]
=      #Traversing_bit_4

A      #POS_ZSW_1[13]
=      #Traversing_bit_5
```

// u POS_ZSW_1 je 6. bit (ZSW2[14]) a 7. bit (ZSW2[15]) rezervni

```
A      #POS_ZSW_1[0]
=      #STOP_cam_minus

A      #POS_ZSW_1[1]
=      #STOP_cam_plus

A      #POS_ZSW_1[2]
=      #Bit_0

A      #POS_ZSW_1[3]
=      #Bit_1

A      #POS_ZSW_1[4]
=      #Flying_ref

A      #POS_ZSW_1[5]
=      #Bit_2

A      #POS_ZSW_1[6]
```

```
=      #Bit_4  
  
A      #POS_ZSW_1[7]  
=      #MDI_active
```

Network: 9	Presun slova POS_ZSW_2 (EPOS status word 2) na vystup
------------	---

```
A      #POS_ZSW_2[8]  
=      #Tracking_mode  
  
A      #POS_ZSW_2[9]  
=      #Velocity_limiting  
  
A      #POS_ZSW_2[10]  
=      #Setpoint_available  
  
A      #POS_ZSW_2[11]  
=      #Printing_mark  
  
A      #POS_ZSW_2[12]  
=      #Axis_moves_forwards  
  
A      #POS_ZSW_2[13]  
=      #Axis_moves_backwards  
  
A      #POS_ZSW_2[14]  
=      #SW_limit_minus  
  
A      #POS_ZSW_2[15]  
=      #SW_limit_plus  
  
A      #POS_ZSW_2[0]  
=      #Cam_switch_pos_1  
  
A      #POS_ZSW_2[1]  
=      #Cam_switch_pos_2  
  
A      #POS_ZSW_2[2]  
=      #Direct_output_1  
  
A      #POS_ZSW_2[3]  
=      #Direct_output_2  
  
A      #POS_ZSW_2[4]  
=      #Fixed_stop_reached  
  
A      #POS_ZSW_2[5]  
=      #Fixed_stop_clamping  
  
A      #POS_ZSW_2[6]  
=      #Travel_to_fixed_stop_1  
  
A      #POS_ZSW_2[7]  
=      #Traversing_command
```


Network: 10

Presun slova MELDW (Message word) na vystup

```
A      #MELDW[8]
=      #Ramp_completed

A      #MELDW[9]
=      #Torque_utilization

A      #MELDW[10]
=      #n_act_speed_thresh_val_3

A      #MELDW[11]
=      #n_act_speed_thresh_val_2

// u MELDW je 4. bit (MELDW[12]) a 5. bit (MELDW[13]) rezervni

A      #MELDW[14]
=      #Alarm_motor_overtemp

A      #MELDW[15]
=      #Alarm_pwr_unit_temp

A      #MELDW[0]
=      #Speed_deviation

// u MELDW je 9. bit (MELDW[1]) a 10. bit (MELDW[2]) rezervni

A      #MELDW[3]
=      #Controller_enable

A      #MELDW[4]
=      #Drive_ready

A      #MELDW[5]
=      #Pulses_enabled_2

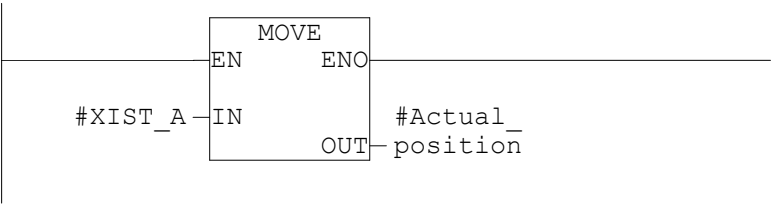
// u MELDW je 14. bit (MELDW[6]) a 15. bit (MELDW[7]) rezervni
```

Network: 11

Prevod DW XIST_A na aktualni polohu (v LU)

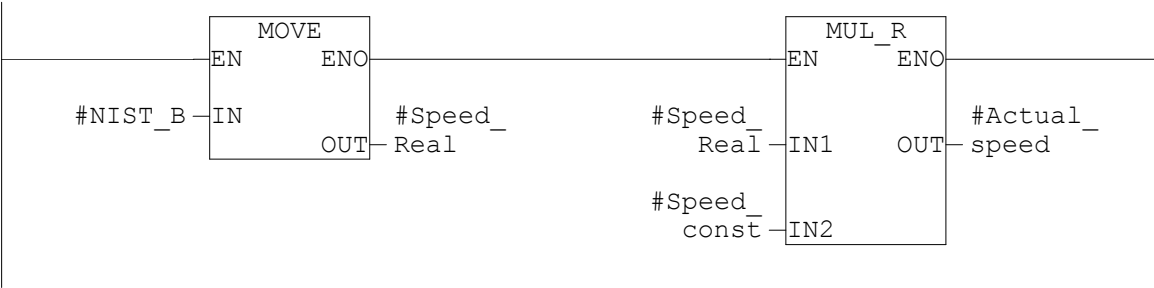
Zaporna hodnota je jizda na opacnou stranu.

Normalizace: 1 hex = 1 LU.



Network: 12Prevod DW NIST_B na aktualni rychlost (v ot/min)

Normalizace: 4000000 hex = 6000 ot/min (p2000).



Network: 13Presun slova FAULT_CODE (Fault code) na vystup

```
A      #FAULT_CODE[8]
=      #Fault_0

A      #FAULT_CODE[9]
=      #Fault_1

A      #FAULT_CODE[10]
=      #Fault_2

A      #FAULT_CODE[11]
=      #Fault_3

A      #FAULT_CODE[12]
=      #Fault_4

A      #FAULT_CODE[13]
=      #Fault_5

A      #FAULT_CODE[14]
=      #Fault_6

A      #FAULT_CODE[15]
=      #Fault_7

A      #FAULT_CODE[0]
=      #Fault_8

A      #FAULT_CODE[1]
=      #Fault_9

A      #FAULT_CODE[2]
=      #Fault_10

A      #FAULT_CODE[3]
=      #Fault_11

A      #FAULT_CODE[4]
=      #Fault_12

A      #FAULT_CODE[5]
=      #Fault_13
```

A#FAULT_CODE[6]

=#Fault_14

A#FAULT_CODE[7]

=#Fault_15

Network: 14

Presun slova WARN_CODE (Alarm code) na vystup

A#WARN_CODE[8]

=#Warn_0

A#WARN_CODE[9]

=#Warn_1

A#WARN_CODE[10]

=#Warn_2

A#WARN_CODE[11]

=#Warn_3

A#WARN_CODE[12]

=#Warn_4

A#WARN_CODE[13]

=#Warn_5

A#WARN_CODE[14]

=#Warn_6

A#WARN_CODE[15]

=#Warn_7

A#WARN_CODE[0]

=#Warn_8

A#WARN_CODE[1]

=#Warn_9

A#WARN_CODE[2]

=#Warn_10

A#WARN_CODE[3]

=#Warn_11

A#WARN_CODE[4]

=#Warn_12

A#WARN_CODE[5]

=#Warn_13

A#WARN_CODE[6]

=#Warn_14

A#WARN_CODE[7]

=#Warn_15

Network: 15

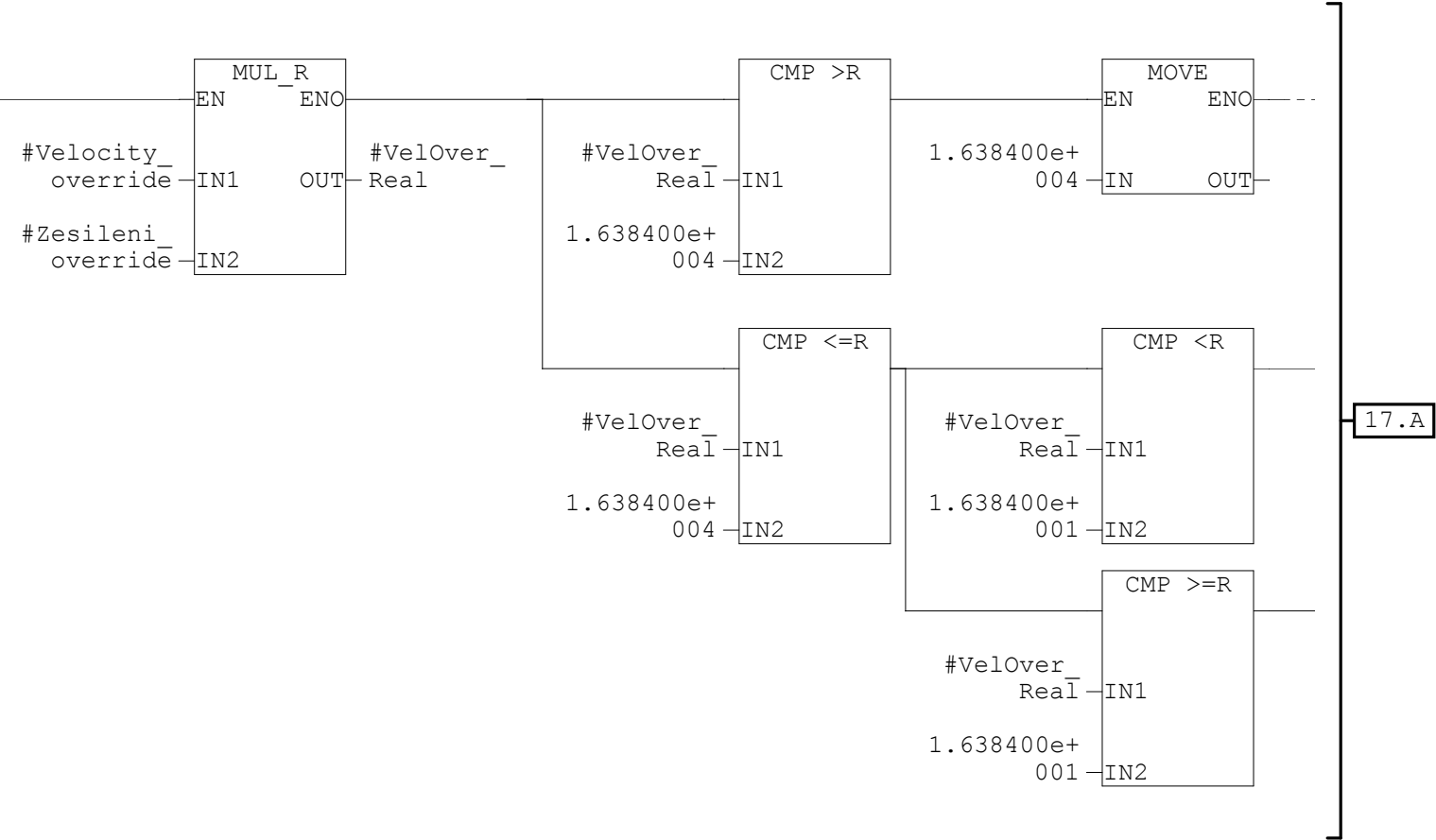
Misto pro praci s volnym slovem FREE_2

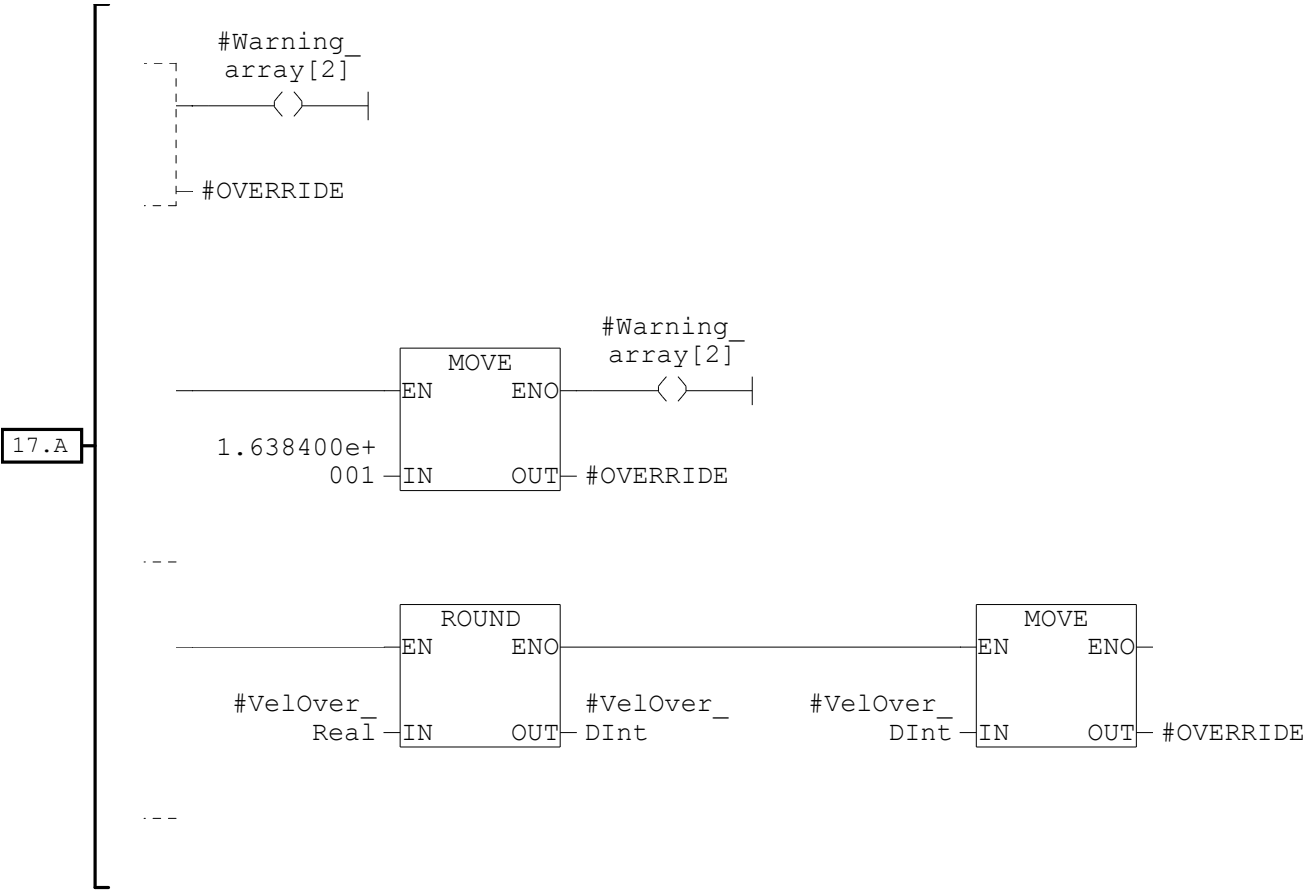
Network: 16

Zde konci prace se stavovymi hodnotami a zacina s ridicimi!!!

Network: 17 Nastaveni override pro rychlost (OVERRIDE)

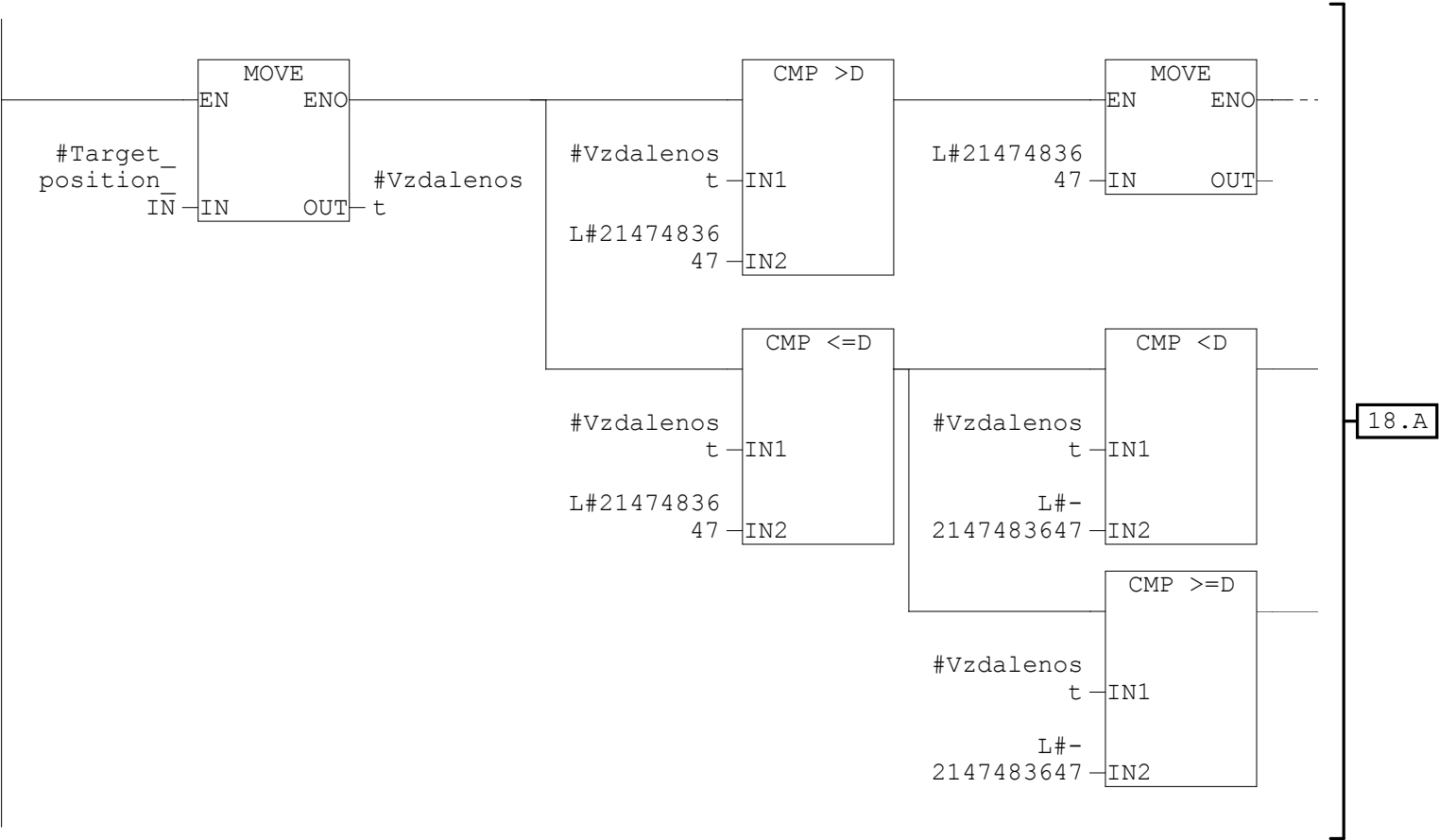
Regulovatelne v rozsahu 0.1 - 100%.
Normalizace: 4000 hex = 100%.

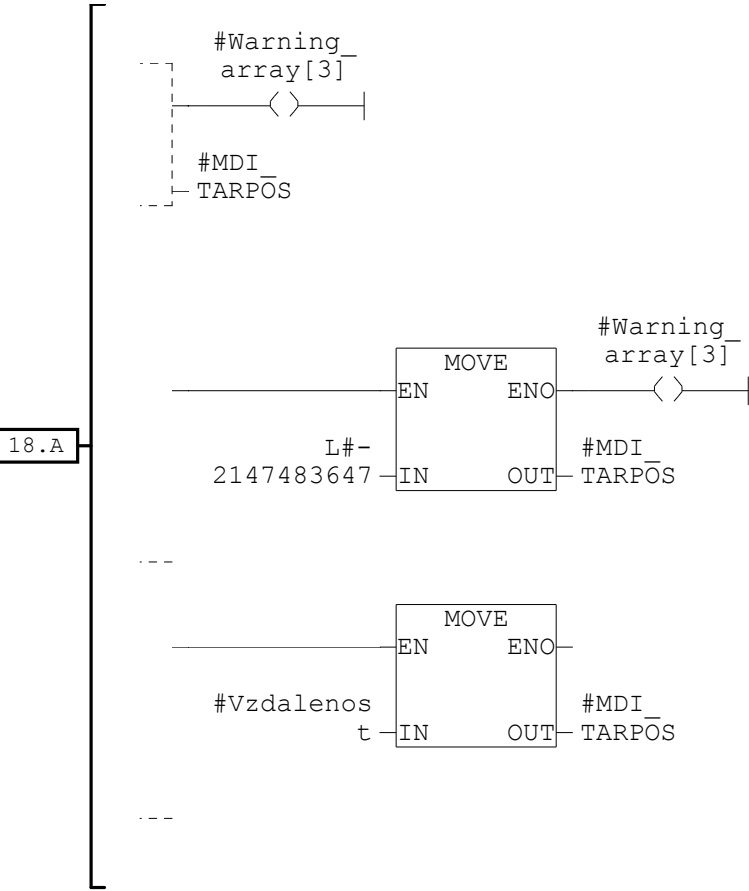




Network: 18 Nastaveni vzdalenosti (MDI_TARPOS), ktera se ma ujet (v LU)

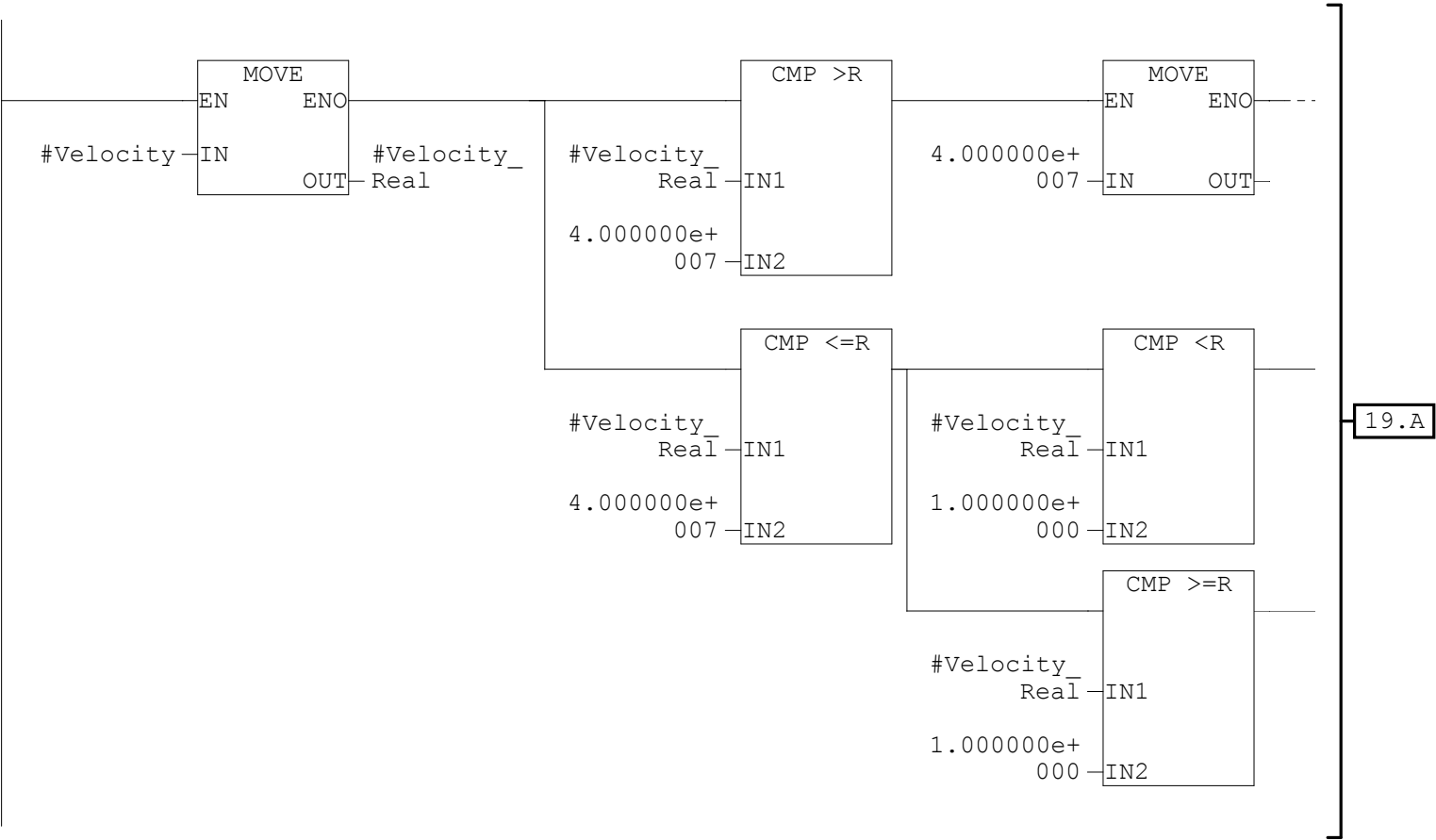
Rozsah nastaveni je od -2147483647 po 2147483647. Normalizace: 1 hex = 1 LU.

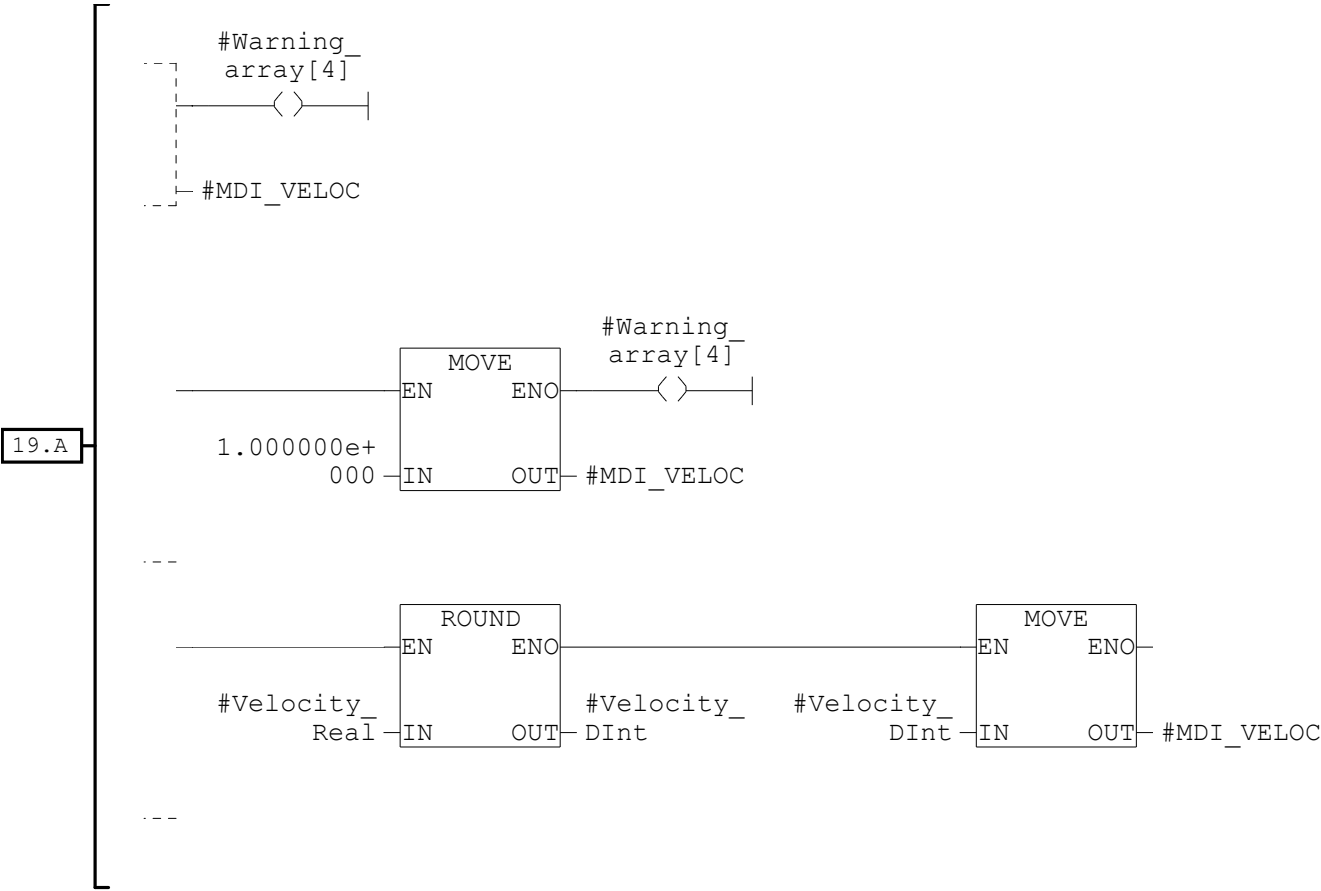




Network: 19 Nastaveni rychlosti (MDI_VELOC) menice v nasobcich 1000 LU/min

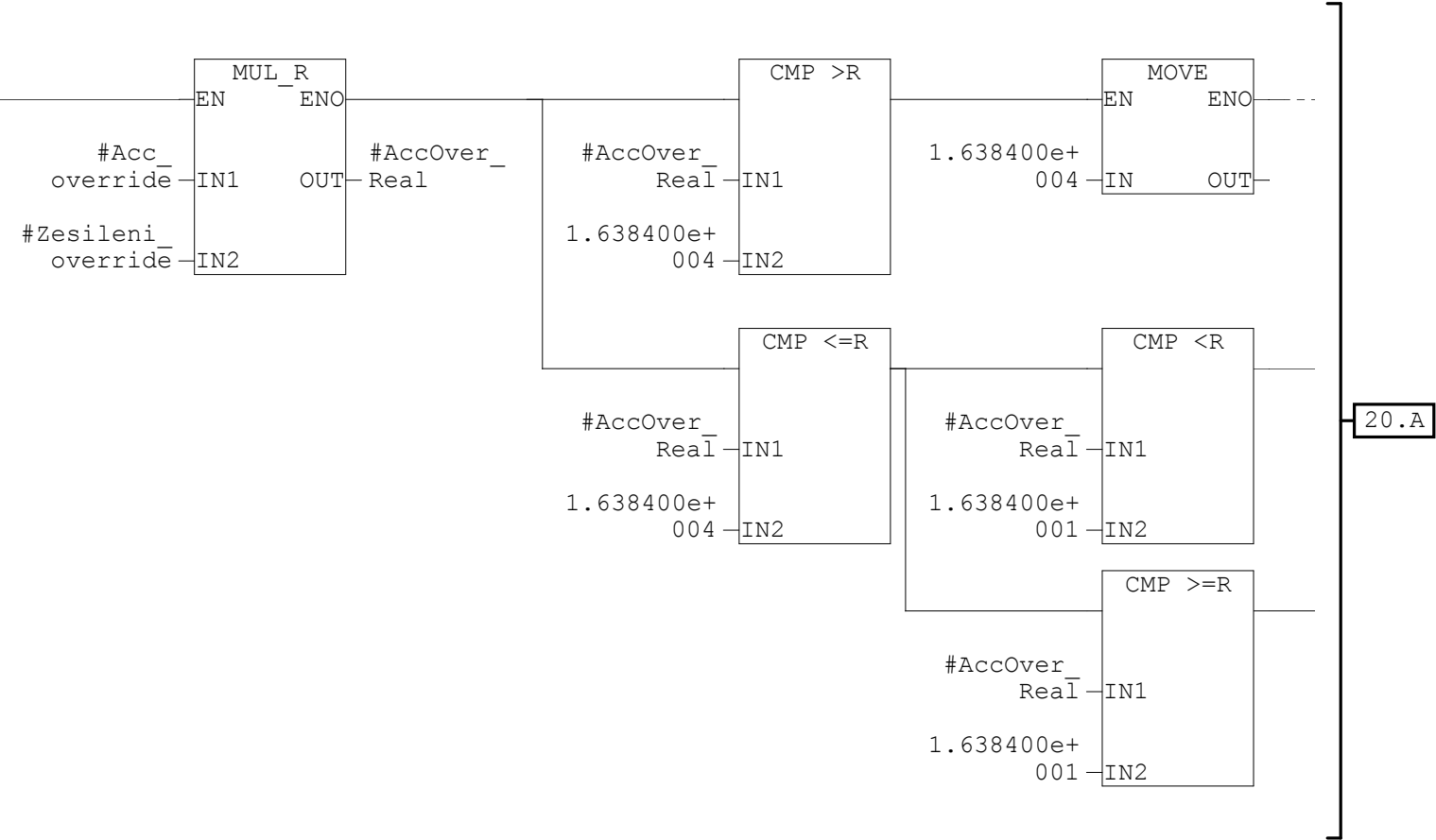
Regulovatelna v rozmezi 1 - 40000000. Co je ale maximalni rychlost, urcuje nastavitelny parametr p2571!
Normalizace: 1 hex = 1000 LU/min.

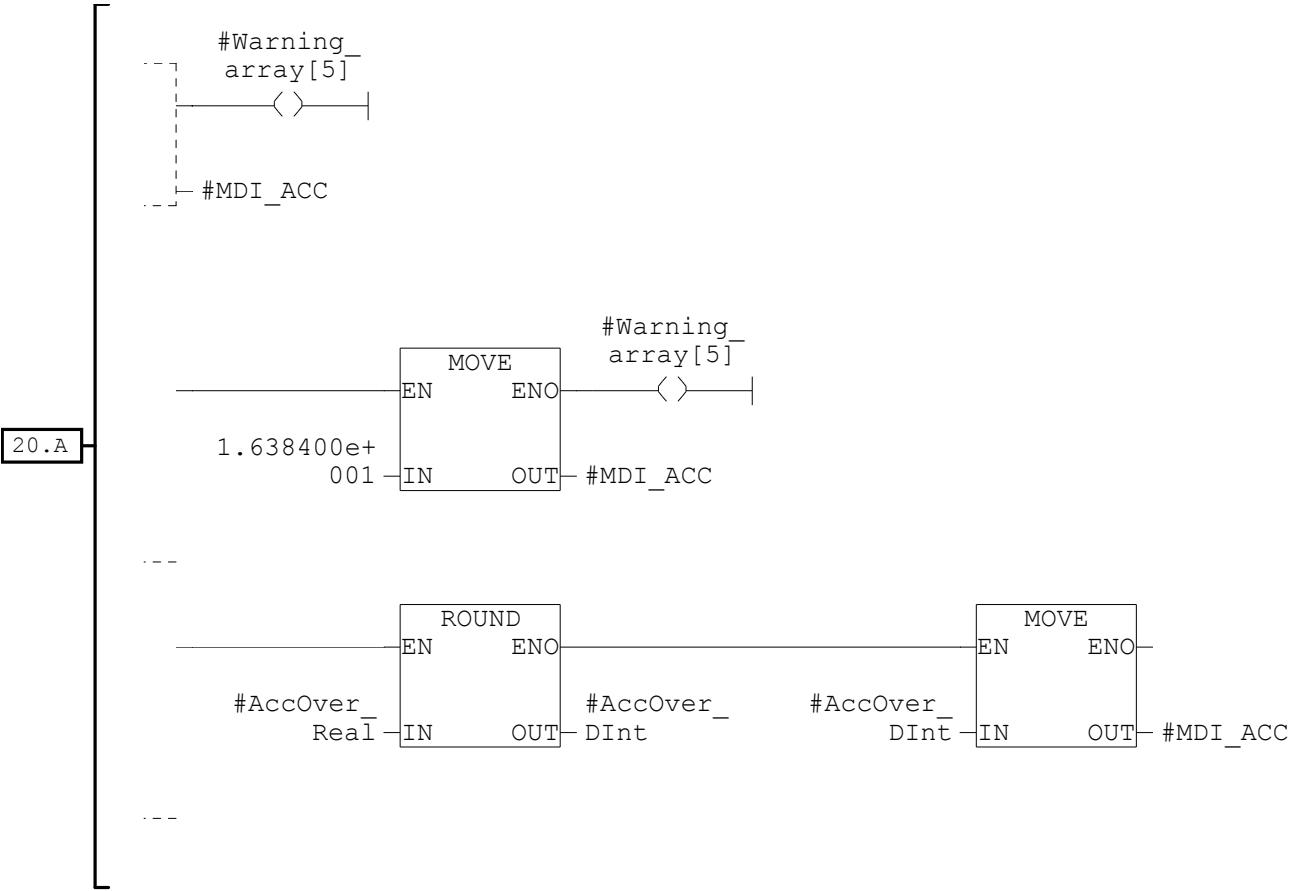




Network: 20 Nastaveni override pro zrychleni (MDI_ACC)

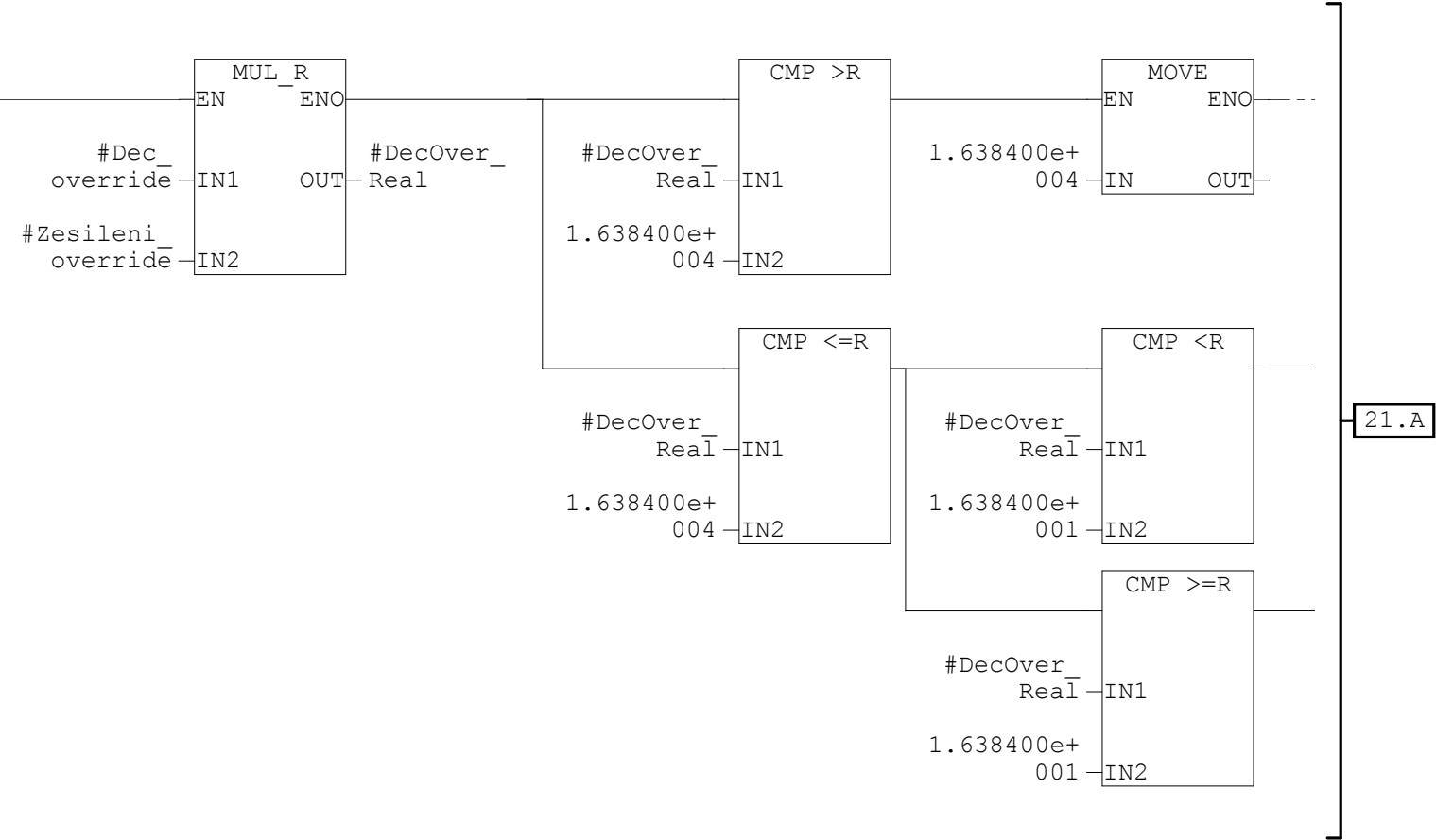
Regulovatelne v rozsahu 0.1 - 100%.
Normalizace: 4000 hex = 100%.

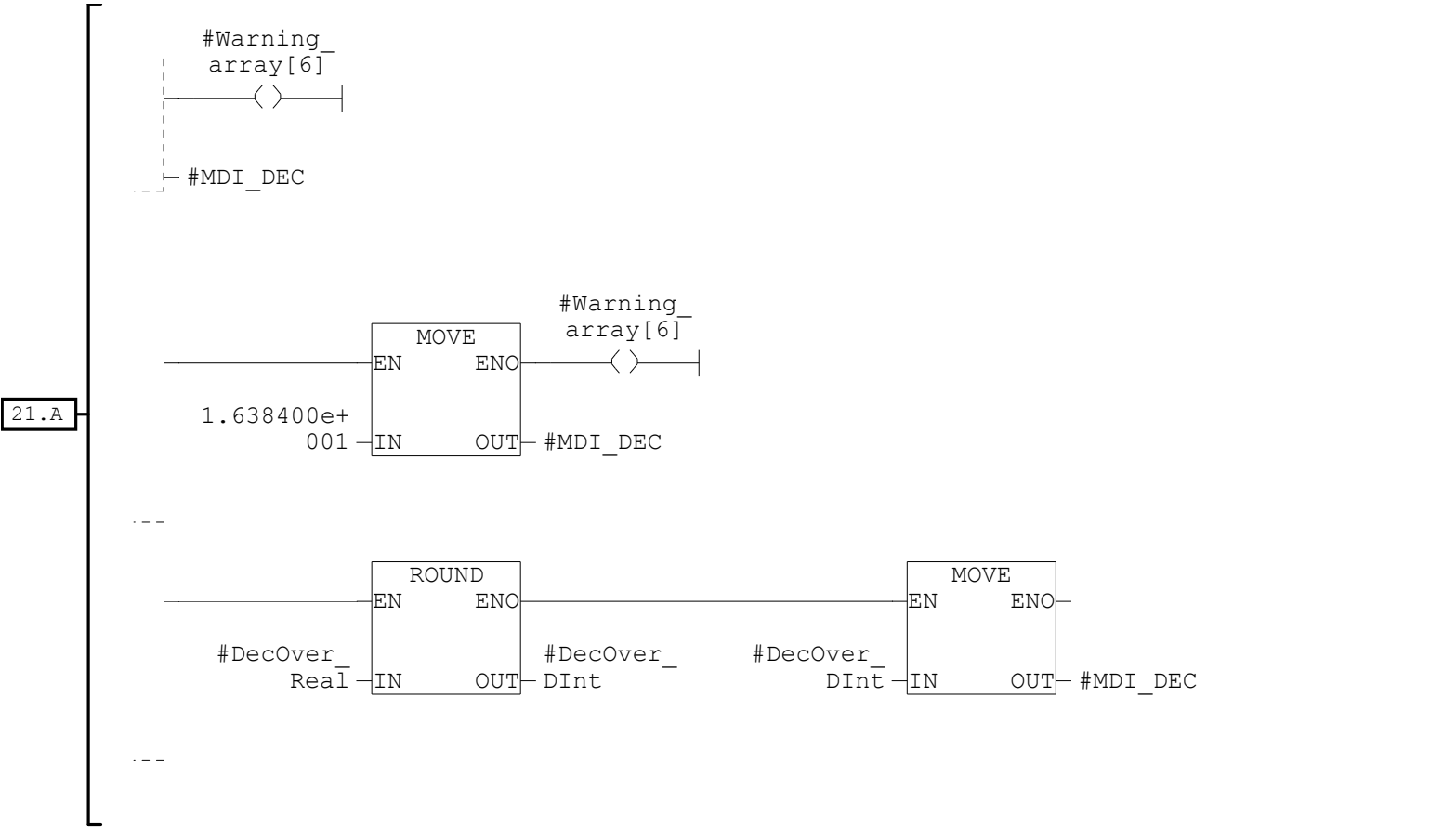




Network: 21 Nastaveni override pro zpomaleni (MDI_DEC)

Regulovatelne v rozsahu 0.1 - 100%.
Normalizace: 4000 hex = 100%.





Network: 22

Misto pro praci s volnym slovem FREE_1

Network: 23

Presun ridicich slov (STW1 a STW2) na vstup

A

#ONOFF1

=

#STW1[8]

A

#OFF2

=

#STW1[9]

A

#OFF3

=

#STW1[10]

A

#Enable_operation

=

#STW1[11]

A

#EPOS_reject

=

#STW1[12]

A

#EPOS_stop

=

#STW1[13]

```
A      #EPOS_activate
=      #STW1[14]

A      #Ack_fault
=      #STW1[15]

A      #EPOS_jog_1
=      #STW1[0]

A      #EPOS_jog_2
=      #STW1[1]

A      #Master_PLC
=      #STW1[2]

A      #EPOS_start
=      #STW1[3]
```

// u STW1 je 12. bit (STW1[4]) az 15. bit (STW1[7]) rezervni

```
A      #DDS_bit_0
=      #STW2[8]

A      #DDS_bit_1
=      #STW2[9]

A      #DDS_bit_2
=      #STW2[10]

A      #DDS_bit_3
=      #STW2[11]

A      #DDS_bit_4
=      #STW2[12]
```

// u STW2 je 5. bit (STW2[13]) a 6. bit (STW1[14]) rezervni

```
A      #Parking_axes
=      #STW2[15]

A      #Activate_travel
=      #STW2[0]
```

// u STW2 je 9. bit (STW2[1]) a 10. bit (STW2[2]) rezervni

```
A      #Motor_changeover_1
=      #STW2[3]

A      #Master_bit_0
=      #STW2[4]

A      #Master_bit_1
=      #STW2[5]

A      #Master_bit_2
=      #STW2[6]

A      #Master_bit_3
=      #STW2[7]
```

Network: 24 Presun slova POS_STW_1 (EPOS control word 1) na vstup
--

```
A      #EPOS_bit_0
=      #POS_STW_1[8]
```

```
A      #EPOS_bit_1
=      #POS_STW_1[9]
```

```
A      #EPOS_bit_2
=      #POS_STW_1[10]
```

```
A      #EPOS_bit_3
=      #POS_STW_1[11]
```

```
A      #EPOS_bit_4
=      #POS_STW_1[12]
```

```
A      #EPOS_bit_5
=      #POS_STW_1[13]
```

// u POS_STW_1 je 6. bit (POS_STW_1[14]) a 7. bit (POS_STW_1[15]) rezervni

```
A      #EPOS_pos_type
=      #POS_STW_1[0]
```

```
A      #EPOS_dir_positive
=      #POS_STW_1[1]
```

```
A      #EPOS_dir_negative
=      #POS_STW_1[2]
```

// u POS_STW_1 je 11. bit (POS_STW_1[3]) rezervni

```
A      #EPOS_trans_type
=      #POS_STW_1[4]
```

```
A      #EPOS_acc_edge
=      #POS_STW_1[5]
```

```
A      #EPOS_sett_up
=      #POS_STW_1[6]
```

```
A      #EPOS_direct
=      #POS_STW_1[7]
```

Network: 25 Presun slova POS_STW_2 (EPOS control word 2) na vstup
--

```
A      #EPOS_tracking
=      #POS_STW_2[8]
```

```
A      #EPOS_set
=      #POS_STW_2[9]
```

```
A      #EPOS_search
=      #POS_STW_2[10]
```

// u POS_STW_2 je 3. bit (POS_STW_2[11]) a 4. bit (POS_STW_2[12]) rezervni

```
A      #EPOS_increment
```



```
A      #EPOS_STOP_cam
=      #POS_STW_2[7]
```