



The following table shows the standard network variables of the DME400-LON:

Name	Type	Application				Description
		A11, A13	A34	A24	A44	
nvi00Request	SNVT_obj_request	●	●	●	-	Node Object
nvo00Status	SNVT_obj_status	●	●	●	-	Node Object
nviFileReq	SNVT_file_req	●	●	●	-	Node Object
nvoFileStat	SNVT_file_status	●	●	●	-	Node Object
nvo_VoltSY_Value	SNVT_volt_f	●	-	-	-	Input voltage
nvo_Volt12_Value	SNVT_volt_f	-	●	●	-	AC Phase-to-phase voltage L1 - L2
nvo_Volt23_Value	SNVT_volt_f	-	●	●	-	AC Phase-to-phase voltage L2 - L3
nvo_Volt13_Value	SNVT_volt_f	-	●	●	-	AC Phase-to-phase voltage L1 - L3
nvo_Volt1N_Value	SNVT_volt_f	-	-	●	-	AC Phase-to-neutral voltage L1 - N
nvo_Volt2N_Value	SNVT_volt_f	-	-	●	-	AC Phase-to-neutral voltage L2 - N
nvo_Volt3N_Value	SNVT_volt_f	-	-	●	-	AC Phase-to-neutral voltage L3 - N
nvo_VoltUM_Value	SNVT_volt_f	-	-	●	-	Average value of the voltage
nvo_AmpSY_Value	SNVT_amp_f	●	-	-	-	Input current
nvo_Amp01_Value	SNVT_amp_f	-	●	●	-	AC current L1
nvo_Amp02_Value	SNVT_amp_f	-	●	●	-	AC current L2
nvo_Amp03_Value	SNVT_amp_f	-	●	●	-	AC current L3
nvo_AmpIM_Value	SNVT_amp_f	-	●	●	-	Average value of the current
nvo_AmpMS_Value	SNVT_amp_f	-	●	●	-	Average value of the current and sign of the active power
nvo_AmpB0_Value	SNVT_amp_f	●	-	-	-	RMS value of the current with wire setting range (bimetal)
nvo_AmpB1_Value	SNVT_amp_f	-	●	●	-	RMS value of the current with wire setting range (bimetal), phase 1
nvo_AmpB2_Value	SNVT_amp_f	-	●	●	-	RMS value of the current with wire setting range (bimetal), phase 2
nvo_AmpB3_Value	SNVT_amp_f	-	●	●	-	RMS value of the current with wire setting range (bimetal), phase 3
nvo_AmpBS_Value	SNVT_amp_f	●	-	-	-	Slave pointer function for the measurement of the RMS value
nvo_AmpS1_Value	SNVT_amp_f	-	●	●	-	Slave pointer function for the measurement of the RMS value, phase 1
nvo_AmpS2_Value	SNVT_amp_f	-	●	●	-	Slave pointer function for the measurement of the RMS value, phase 2
nvo_AmpS3_Value	SNVT_amp_f	-	●	●	-	Slave pointer function for the measurement of the RMS value, phase 3
nvo_Frequency	SNVT_freq_f	●	●	●	-	Frequency of the input variable
nvo_TrueSY_Power	SNVT_power_f	●	●	●	-	Active power of the system
nvo_True01_Power	SNVT_power_f	-	-	●	-	Active power phase 1 (phase-to-neutral L1 - N)
nvo_True02_Power	SNVT_power_f	-	-	●	-	Active power phase 2 (phase-to-neutral L2 - N)
nvo_True03_Power	SNVT_power_f	-	-	●	-	Active power phase 3 (phase-to-neutral L3 - N)
nvo_ActSY_PwrFct	SNVT_pwr_fact	●	●	●	-	Active power factor cosf = P/S
nvo_Act01_PwrFct	SNVT_pwr_fact	-	-	●	-	Active power factor phase 1, P1/S1
nvo_Act02_PwrFct	SNVT_pwr_fact	-	-	●	-	Active power factor phase 2, P2/S2
nvo_Act03_PwrFct	SNVT_pwr_fact	-	-	●	-	Active power factor phase 3, P3/S3
nvoReactSY_Pwr	SNVT_power_f	●	●	●	-	Reactive power of the system
nvoReact01_Pwr	SNVT_power_f	-	-	●	-	Reactive power phase 1 (phase-to-neutral L1 - N)
nvoReact02_Pwr	SNVT_power_f	-	-	●	-	Reactive power phase 2 (phase-to-neutral L2 - N)
nvoReact03_Pwr	SNVT_power_f	-	-	●	-	Reactive power phase 3 (phase-to-neutral L3 - N)
nvoApparSY_Pwr	SNVT_power_f	●	●	●	-	Apparent power of the system
nvoAppar01_Pwr	SNVT_power_f	-	-	●	-	Apparent power phase 1 (phase-to-neutral L1 - N)
nvoAppar02_Pwr	SNVT_power_f	-	-	●	-	Apparent power phase 2 (phase-to-neutral L2 - N)
nvoAppar03_Pwr	SNVT_power_f	-	-	●	-	Apparent power phase 3 (phase-to-neutral L3 - N)
nvo_PwrSY_Fact	SNVT_pwr_fact	●	●	●	-	Power factor of the system
nvo_Pwr01_Fact	SNVT_pwr_fact	-	-	●	-	Power factor phase 1
nvo_Pwr02_Fact	SNVT_pwr_fact	-	-	●	-	Power factor phase 2
nvo_Pwr03_Fact	SNVT_pwr_fact	-	-	●	-	Power factor phase 3
nvoReactSY_Fact	SNVT_pwr_fact	●	●	●	-	Reactive power factor sinf = Q/S
nvoReact01_Fact	SNVT_pwr_fact	-	-	●	-	Reactive power factor phase 1, Q1/S1
nvoReact02_Fact	SNVT_pwr_fact	-	-	●	-	Reactive power factor phase 2, Q2/S2
nvoReact03_Fact	SNVT_pwr_fact	-	-	●	-	Reactive power factor phase 3, Q3/S3
nvo_EnergyA	SNVT_elec_whr_f	●	●	●	-	Energy counter 1
nvo_EnergyB	SNVT_elec_whr_f	●	●	●	-	Energy counter 2
nvo_EnergyC	SNVT_elec_whr_f	●	●	●	-	Energy counter 3
nvo_EnergyD	SNVT_elec_whr_f	●	●	●	-	Energy counter 4
nvi_Reset_Energy	SNVT_lev_disc	●	●	●	-	Energy counter reset
nvi_ResSlavePnt	SNVT_lev_disc	●	●	●	-	Maximum value pointer reset

● Indicates whether the LonMARK Network is enabled.

Network variables of non-used objects all have the value zero. As these values do not change, they are not transmitted on the network.

The variables which are active can be determined by using the variable nvi00Request and nvo00Status in accordance with the definition of the SNVTs.

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## 1. File Header

File: \DME400.XIF generated by APC Revision 2.70, XIF Version 3.1  
Copyright (c) 1990, 1995 by Echelon Corporation  
All Rights Reserved. Run on Fri May 29 10:14:58 1998

```
80:00:36:15:03:04:04:01                                > Standard Program ID
2 15 1 57 1 3 3 3 3 3 11 11 11 11 0 0 8 0 1 1 1 1
0 5 6 13 28 952 0 15 5 3 277 4
1 7 1 0 4 4 4 15 200 0
78125 0 0 0 0 0 0 0 0 0 0 0 0
90 0 240 0 0 0 40 40 0 5 8 5 12 14 15
*
"&3.0@0,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1
",1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,3,3;DME400

TAG fx_explicit_tag 0 0 0 0
0 0 63 1 0 1 0 1 0 1 0 0 0
```

## 2. Node Objects

### 2.1. *Node Object*

**VAR nvi00Request 0 0 0 0**

0 1 63 0 0 1 0 1 0 1 0 0 0  
"@0|1  
92 \* 2  
2 0 0 0 0  
1 0 0 1 0

Type: SNVT\_obj\_request

(Input Network Variable)

### 2.2. *Node Object*

**VAR nvo00Status 1 0 0 0**

0 1 63 1 0 1 0 1 0 1 0 0 0  
"@0|2  
93 \* 23  
2 0 0 0 0  
3 0 1 0 0  
3 1 1 0 0  
3 2 1 0 0  
3 3 1 0 0  
3 4 1 0 0  
3 5 1 0 0  
3 6 1 0 0  
3 7 1 0 0  
3 0 1 0 0  
3 1 1 0 0  
3 2 1 0 0  
3 3 1 0 0  
3 4 1 0 0  
3 5 1 0 0  
3 6 1 0 0  
3 7 1 0 0  
3 0 1 0 0  
3 1 1 0 0  
3 2 1 0 0  
3 3 1 0 0  
3 4 4 0 0  
3 0 8 0 0

Type: SNVT\_obj\_status

(Output Network Variable)

### 2.3. Node Object

**VAR nv\_file\_request 2 0 0 0**

```
0 1 63 0 0 1 0 1 0 1 0 1 0  
"@0|5  
73 * 6  
1 0 0 1 0  
2 0 0 0 0  
2 0 0 0 0  
4 0 5 0 0  
1 0 0 1 0  
1 0 0 1 0
```

Type: SNVT\_file\_req

(Output Network Variable)

### 2.4. Node Object

**VAR nv\_file\_status 3 0 0 0**

```
0 1 63 1 0 1 0 1 0 1 0 1 0  
"@0|6  
74 * 4  
1 0 0 1 0  
2 0 0 0 0  
2 0 0 0 0  
4 0 2 2 0 0
```

Type: SNVT\_file\_status

(Output Network Variable)

### 3. Voltage

#### 3.1. AC Input voltage

**VAR nvo\_VoltSY\_Value 4 0 0 0** Type: SNVT\_volt\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@1|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

#### 3.2. AC Phase-to-phase voltage L1 - L2

**VAR nvo\_Volt12\_Value 5 0 0 0** Type: SNVT\_volt\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@2|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

#### 3.3. AC Phase-to-phase voltage L2 - L3

**VAR nvo\_Volt23\_Value 6 0 0 0** Type: SNVT\_volt\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@3|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

#### 3.4. AC Phase-to-phase voltage L1 - L3

**VAR nvo\_Volt13\_Value 7 0 0 0** Type: SNVT\_volt\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@4|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

#### 3.5. AC Phase-to-neutral voltage L1 - N

**VAR nvo\_Volt1N\_Value 8 0 0 0** Type: SNVT\_volt\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@5|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 3.6. AC Phase-to-neutral voltage L2 - N

**VAR nvo\_Volt2N\_Value** 9 0 0 0      Type: SNVT\_volt\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@6|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 3.7. AC Phase-to-neutral voltage L3 - N

**VAR nvo\_Volt3N\_Value** 10 0 0 0      Type: SNVT\_volt\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@7|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 3.8. Avarage value of the voltage

**VAR nvo\_VoltUM\_Value** 11 0 0 0      Type: SNVT\_volt\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@8|1  
66 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 4. Current

### 4.1. AC Input current

**VAR nvo\_AmpSY\_Value** 12 0 0 0      Type: SNVT\_amp\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@9|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 4.2. AC current L1

**VAR nvo\_Amp01\_Value** 13 0 0 0      Type: SNVT\_amp\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@10|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 4.3. AC current L2

**VAR nvo\_Amp02\_Value** 14 0 0 0      Type: SNVT\_amp\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@11|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 4.4. AC current L3

**VAR nvo\_Amp03\_Value** 15 0 0 0      Type: SNVT\_amp\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@12|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 4.5. Average value of the currents

**VAR nvo\_AmpIM\_Value** 16 0 0 0      Type: SNVT\_amp\_f      (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@13|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.6. Average value of the currents and sign of the active power**

**VAR nvo\_AmpMS\_Value 17 0 0 0** Type: SNVT\_amp\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@14|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.7. RMS value of the current with wire setting range (bimetal) 15Min.**

**VAR nvo\_AmpB0\_Value 18 0 0 0** Type: SNVT\_amp\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@15|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.8. RMS value of the current with wire setting range (bimetal), phase 1 15Min.**

**VAR nvo\_AmpB1\_Value 19 0 0 0** Type: SNVT\_amp\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@16|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.9. RMS value of the current with wire setting range (bimetal), phase 2 15Min.**

**VAR nvo\_AmpB2\_Value 20 0 0 0** Type: SNVT\_amp\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@17|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.10. RMS value of the current with wire setting range (bimetal), phase 3 15Min.**

**VAR nvo\_AmpB3\_Value 21 0 0 0** Type: SNVT\_amp\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@18|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.11. Slave pointer function for the measurement of the RMS value                    15Min.**

**VAR nvo\_AmpBS\_Value** 22 0 0 0                    Type: SNVT\_amp\_f                    (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@19|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.12. Slave pointer function for the measurement of the RMS value, phase 1 15Min.**

**VAR nvo\_AmpS1\_Value** 23 0 0 0                    Type: SNVT\_amp\_f                    (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@20|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.13. Slave pointer function for the measurement of the RMS value, phase 2 15Min.**

**VAR nvo\_AmpS2\_Value** 24 0 0 0                    Type: SNVT\_amp\_f                    (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@21|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

**4.14. Slave pointer function for the measurement of the RMS value, phase 3 15Min.**

**VAR nvo\_AmpS3\_Value** 25 0 0 0                    Type: SNVT\_amp\_f                    (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@22|1  
48 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 5. Frequency

### 5.1. Frequency of the input variable

VAR nvo\_Frequency 26 0 0 0                    Type: SNVT\_freq\_f                    (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@23|1  
75 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 6. Active power

### 6.1. Active power of the system

**VAR nvo\_TrueSY\_Power 27 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@24|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 6.2. Active power phase 1 (phase-to-neutral L1 – N)

**VAR nvo\_True01\_Power 28 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@25|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 6.3. Active power phase 2 (phase-to-neutral L2 – N)

**VAR nvo\_True02\_Power 29 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@26|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 6.4. Active power phase 3 (phase-to-neutral L3 – N)

**VAR nvo\_True03\_Power 30 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@27|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 7. Active power factor

### 7.1. Active power factor cosf = P/S

**VAR nvo\_ActSY\_PwrFct 31 0 0 0** Type: SNVT\_power\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@28|1  
98 \* 1  
2 0 0 1 0

### 7.2. Active power factor phase 1, P1/S1

**VAR nvo\_Act01\_PwrFct 32 0 0 0** Type: SNVT\_power\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@29|1  
98 \* 1  
2 0 0 1 0

### 7.3. Active power factor phase 2, P2/S2

**VAR nvo\_Act02\_PwrFct 33 0 0 0** Type: SNVT\_power\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@30|1  
98 \* 1  
2 0 0 1 0

### 7.4. Active power factor phase 3, P3/S3

**VAR nvo\_Act03\_PwrFct 34 0 0 0** Type: SNVT\_power\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@31|1  
98 \* 1  
2 0 0 1 0

## 8. Reactive power

### 8.1. *Reactive power of the system*

**VAR nvoReactSY\_Pwr 35 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@32|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 8.2. *Reactive power phase 1 (phase-to-neutral L1 – N)*

**VAR nvoReact01\_Pwr 36 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@33|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 8.3. *Reactive power phase 2 (phase-to-neutral L2 – N)*

**VAR nvoReact02\_Pwr 37 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@34|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 8.4. *Reactive power phase 3 (phase-to-neutral L3 – N)*

**VAR nvoReact03\_Pwr 38 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@35|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 9. Apparent power

### 9.1. Apparent power of the system

**VAR nvo\_ApparSY\_Pwr 39 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@36|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 9.2. Apparent power phase 1 (phase-to-neutral L1 – N)

**VAR nvo\_Appar01\_Pwr 40 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@37|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 9.3. Apparent power phase 2 (phase-to-neutral L2 – N)

**VAR nvo\_Appar02\_Pwr 41 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@38|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

### 9.4. Apparent power phase 3 (phase-to-neutral L3 – N)

**VAR nvo\_Appar03\_Pwr 42 0 0 0** Type: SNVT\_power\_f (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@39|1  
57 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

## 10. Power factor

### 10.1. Power factor of the system

**VAR nvo\_PwrSY\_Fact 43 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@40|1  
98 \* 1  
2 0 0 1 0

### 10.2. Power factor phase 1

**VAR nvo\_Pwr01\_Fact 44 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@41|1  
98 \* 1  
2 0 0 1 0

### 10.3. Power factor phase 2

**VAR nvo\_Pwr02\_Fact 45 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@42|1  
98 \* 1  
2 0 0 1 0

### 10.4. Power factor phase 3

**VAR nvo\_Pwr03\_Fact 46 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@43|1  
98 \* 1  
2 0 0 1 0

## 11. Reactive power factor

### 11.1. *Reactive power factor sinf = Q/S*

**VAR nvoReactSY\_Fact 47 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@44|1  
98 \* 1  
2 0 0 1 0

### 11.2. *Reactive power factor phase 1, Q1/S1*

**VAR nvoReact01\_Fact 48 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@45|1  
98 \* 1  
2 0 0 1 0

### 11.3. *Reactive power factor phase 2, Q2/S2*

**VAR nvoReact02\_Fact 49 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@46|1  
98 \* 1  
2 0 0 1 0

### 11.4. *Reactive power factor phase 3, Q3/S3*

**VAR nvoReact03\_Fact 50 0 0 0** Type: SNVT\_pwr\_fact (Output Network Variable)  
0 1 63 1 0 1 0 1 0 1 0 0 0  
"@47|1  
98 \* 1  
2 0 0 1 0

## 12. Energy counters

### 12.1. *Energy counter 1*

**VAR nvo\_EnergyA 51 0 0 0**

0 1 63 1 0 1 0 1 0 1 0 0 0  
"@48|1  
68 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

Type: SNVT\_elec\_whr\_f

(Output Network Variable)

### 12.2. *Energy counter 2*

**VAR nvo\_EnergyB 52 0 0 0**

0 1 63 1 0 1 0 1 0 1 0 0 0  
"@49|1  
68 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

Type: SNVT\_elec\_whr\_f

(Output Network Variable)

### 12.3. *Energy counter 3*

**VAR nvo\_EnergyC 53 0 0 0**

0 1 63 1 0 1 0 1 0 1 0 0 0  
"@50|1  
68 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

Type: SNVT\_elec\_whr\_f

(Output Network Variable)

### 12.4. *Energy counter 4*

**VAR nvo\_EnergyD 54 0 0 0**

0 1 63 1 0 1 0 1 0 1 0 0 0  
"@51|1  
68 \* 5  
3 0 1 0 0  
3 1 7 0 0  
3 0 1 0 0  
3 1 7 0 0  
2 0 0 0 0

Type: SNVT\_elec\_whr\_f

(Output Network Variable)

## 13. Resets

### 13.1. *Energy counter reset*

**VAR nvi\_ResetEnergy 55 0 0 0**      Type: SNVT\_lev\_disc      (Input Network Variable)  
0 1 63 0 0 1 0 1 0 1 0 0 0  
"@52|1  
22 \* 1  
1 0 0 1 0

### 13.2. *Maximum value pointer reset*

**VAR nvi\_ResSlavePnt 56 0 0 0**      Type: SNVT\_lev\_disc      (Input Network Variable)  
0 1 63 0 0 1 0 1 0 1 0 0 0  
"@53|1  
22 \* 1  
1 0 0 1 0