ENGLISH

Easy Altivar ATV610 Parameter List

PHA1600603

1 [Simply start] SYS -

1.1 [Macro Config] CFG
- [Start/Stop] bSt S
- [Auto/Manual] bAnn
- [PID controller] bP id
- [Preset speeds] bPSP
- [Modbus] bnbC
- [Multi-pump 1] bnP 1
- [Multi-pump 2] bnP2

1.2 [Simply start] S in -
- [Nominal Motor Power] nPr
- [Nom Motor Current] nCr
- [Motor Th Current] itH
- [Acceleration] ACC
- [Deceleration] dEC
- [Low speed] LSP
- [High speed] HSP
- [Output Ph Rotation] PHr
- [Ref Freq 1 Config] Fr 1
- [OutPhaseLoss Assign] oPL
- [2/3-Wire Control] tCC
- [Dual rating] drt

1.3 [Modified parameters] Lnd -

2 [Display] Mon -

2.1 [Motor parameters] Mno -
- [Motor Speed] SPd
- [Motor voltage] uoP
- [Motor Power] oPr
- [Motor Torque] otr
- [Motor Current] LCr
- [Motor Therm State] tHr

2.2 [Drive parameters] MP i -
- [Pre-Ramp Ref Freq] FrH
- [Ref Frequency] LFr
- [Motor Frequency] rFr
- [Mains Voltage] uLn
- [DC bus voltage] VbuS
- [Drive Therm State] tHd
- [Used param. set] CFPS
- [Motor Run Time] rtHH
- [Power-on time] PtHH
- [IGBT Warning Counter] tAC
- [PID reference] rPC
- [PID feedback] rPF
- [PID Error] rPE
- [PID Output] rPo

2.3 [I/O Map] ioM -
- [Digital Input Map] LiA -
- [Analog inputs image] AiA -
  - [AI(x) assignment] AiXA
  - [AI(x) Min. Value] uiLX
  - [AI(x) Max Value] uiHX
  - [AI(x) Min. Value] CrLX
  - [AI(x) Max Value] CrHX
  - [AI(x) filter] AiXF
  - where x is a number from 1 to 5
- [Analog outputs image] AoA -
  - [AQ(x) assignment] AoX
  - [AQ(x) min Output] uoLX
  - [AQ(x) max Output] uoHX
  - [AQ(x) min output] AoLX
  - [AQ(x) max output] AoHX
  - [Scaling AQ(x)min] ASLX
  - [Scaling AQ(x)max] ASHX
  - [AQ(x) Filter] AoXF
  - where x is a number from 1 to 2
- [Digital Output Map] LoA

2.4 [Energy parameters] EnP -
- [Motor Consumption] ME4
- [Motor Consumption] ME3
- [Motor Consumption] ME2
- [Motor Consumption] ME1
- [Motor Consumption] ME0

2.5 [Communication map] CMM -
- [Command Channel] CMdC
- [Cmd Register] CMd
- [Ref Freq Channel] rFCC
- [Pre-Ramp Ref Freq] FrH
- [CIA402 State Reg] EtA
- [Modbus network diag] Mnd -
  - [COM LED] Mdb 1
  - [Mdb Frame Nb] M1ct
  - [Mdb NET CRC errors] M1Ec
  - [Com. scanner input map] iSA -
    - [Com Scan In(x) val.] nM1 to nM8
  - [Com scan output map] oSA -
    - [Com Scan Out(x) val.] nC1 to nC8
  - [Modbus HMI diag] MdH -
    - [COM LED] Mdb2
    - [Mdb NET frames] M2ct
    - [Mdb NET CRC errors] M2Ec
  - [Command word image] CWi -
    - [Modbus Cmd] CMd1
    - [COM. Module cmd.] CMd3
  - [Freq. ref. word map] rWi -
    - [Modbus Ref Freq] LFr1
    - [Com Module Ref Freq] LFr3

2.6 [Application Parameters] APr -
- [Variable Speed Pump] MPP -
  - [Available Pumps] MPAn
  - [Nb of Staged Pumps] MPSn
  - [Lead Pump] PLid
  - [Next Staged Pump] PntS
  - [Next Destaged Pump] Pntd
  - [Pump (x) State] PXS
  - [Pump (x) Type] PXt
  - [Pump (x) Runtime] PXot
  - [Pump (x) Nb Starts] PXnS
  - where x is a number from 1 to 6
- [Booster Control Pump] bcP -
  - [Booster Status] bcS

3 [Diagnostics] diA -

3.1 [Diag. data] ddt -
- [Last Warning] LALr
- [last Error] LFt
- [Nb Of Starts] nSM
- [Motor Run Time] rtH
- [Other State] SSt
- [Identification] oid

3.2 [Error history] PFH -
- [Last Error (x)] dP1 to dP8
  - [Drive state] HSx
  - [Last Error (x) Status] EPx
  - [ETI state word] iPx
  - [Cmd word] CMPx
  - [Motor current] LCPx
  - [Output frequency] rFPx
  - [Elapsed time] rtPx
  - [DC bus voltage] uLPx
  - [Motor therm state] tHPx
  - [Command Channel] dCCx
  - [Ref Freq Channel] drCx
  - [Motor Torque] otPx
  - [Drive Thermal State] tdPx
  - [IGBT Junction Temp] tJPx
  - [Switching Frequency] SFPx
  - where x is a number from 1 to 8

3.3 [Warnings] ALr -
- [Actual Warnings] ALrd
- [Warning History] ALh

[-] after code means there are more parameters levels

Some parameters have visibility constraints, see ATV610 Programming manual (EAV64387) on www.se.com

4 [Complete settings] CSt -

4.1 [Motor parameters] MPA -
- [Motor Standard] bFr
- [Nominal Motor Power] nPr
- [Nom Motor Voltage] unS
- [Nom Motor Current] nCr
- [Nominal Motor Freq] FrS
- [Nominal Motor Speed] nSP
- [Max frequency] tFr
- [Motor Th Current] itH
- [Output Ph Rotation] PHr
- [Motor control type] Ctt
- [Sync Nominal I] nCrS(1)
- [Nom SyncMotor Speed] nSPS(1)
- [Nom Motor torque] tqS(1)
- [Pole pairs] PPnS(1)
- [Angle setting type] ASt(1)
- [Syn. EMF constant] PHS(1)
- [SyncMotor Stator R] rSAS(1)
- [Autotune L d-axis] LdS(1)
- [Autotune L q-axis] LqS(1)
- [Sync Nominal Freq] FrSS(1)
- [PSI Align Curr Max] MCr(1)
- [Relative d-axis error] rdAE(1)
- [Saliency mot. state] SMot(1)
- [Tune selection] Stun(1)
- [Rotational Current Level] rCL(1)
- [Rotational Torque Current] rtC(1)
- [RCI Max Freq] rCSP(1)
- [RCI Round Nb] rCrP(1)
- [RCI With Transformer] rCir(1)

(1) Not available for Frame Size 7 = ATV610C22N4 ATV610C25N4

- [U/F Profile] PFL
- [U1] u 1
- [F1] F 1
- [U2] u 2
- [F2] F 2
- [U3] u 3
- [F3] F 3
- [U4] u 4
- [F4] F 4
- [U5] u 5
- [F5] F 5
- [IR compensation] uFr
- [Slip compensation] SLP
- [Switching frequency] SFr
- [Switch Freq Type] SFt
- [Noise Reduction] nrd
- [Motor surge limit.] SVL
- [Attenuation Time] SoP
- [Current Limitation] CLi
- [Autotuning] tun
- [Autotuning Status] tuS
- [Dual rating] drt
- [Boost activation] boA
- [Boost] boo
- [Freq Boost] FAb
- [Input Filter] dCr -
  - [Input Filter] iFi
  - [DC Bus Ripple Config] dCrC

4.2 [Input/Output] io -
- [2/3-Wire Control] tCC
- [2-wire type] tCt
- [Reverse Assign] rrS
- [DI1 Assignment] LiIC -
  - [DI1 Low Assignment] LIL
  - [DI1 High Assignment] LIH
  - [DI1 Delay] Ld
- [DI2 Assignment] Li2C -
- [DI3 Assignment] Li3C -
- [DI4 Assignment] Li4C -
- [DI5 Assignment] Li5C -
- [DI6 Assignment] Li6C -
- [DI11 Assignment] Li11C -
- [DI12 Assignment] Li12C -
- [DI13 Assignment] Li13C -
- [DI14 Assignment] Li14C -
- [DI15 Assignment] Li15C -
- [DI16 Assignment] Li16C -
- [Ref Freq template] bSP
- [AI1 configuration] Ai1 -
  - [AI1 assignment] Ai1A
  - [AI1 Type] Ai1t
  - [AI1 Min. Value] ui1L
  - [AI1 Max Value] ui1H

- [AI1 Min. Value] CrL1
- [AI1 Max Value] CrH1
- [AI1 filter] A1IF
- [AI1 Interm. point X] A1IE
- [AI1 Interm. point Y] A1IS

[AI2 configuration] A12-
[AI3 configuration] A13-
[AI4 configuration] A14-
[AI5 configuration] A15-
[AIV1 assignment] AV1A-
[DQ11 configuration] do11-
[DQ12 configuration] do12-
[R1 configuration] r1-
- [R1 Assignment] r1
- [R1 Delay time] r1d
- [R1 Active at] r1S
- [R1 Holding time] r1H

[R2 configuration] r2-
[R3 configuration] r3-
[R4 configuration] r4-
[R5 configuration] r5-
[R6 configuration] r6-
[AQ1 configuration] Ao1-
- [AQ1 assignment] Ao1-
- [AQ1 Type] Ao1t
- [AQ1 min output] AoL1
- [AQ1 max output] AoH1
- [AQ1 min output] uoL1
- [AQ1 max output] uoH1
- [Scaling AQ1 min] ASL1
- [Scaling AQ1 max] ASH1
- [AQ1 Filter] Ao1F

[AQ2 configuration] Ao2-

4.3 [Command and Reference] CrP-

[Low Speed] LSP
[High Speed] HSP
[Ref Freq 1 Config] Fr1
[Reverse Disable] r1n
[Stop Key Enable] PSt
[Control Mode] CHCF
[Command Switching] CCS
[Cmd channel 1] Cd1
[Cmd channel 2] Cd2
[Freq Switch Assign] rFC
[Ref Freq 2 Config] Fr2
[Copy Ch1-Ch2] CoP
[Forced Local Freq] FLoC
[Time-out forc. local] FLot
[Forced Local Assign] FLo
[HMI cmd.] bMP

4.4 [Generic functions] CSGF-

[Ramp] rAMP-
- [Ramp Type] rPt
- [Ramp increment] inr
- [Acceleration] ACC
- [Deceleration] dEC
- [Begin Acc round] tA1
- [End Acc round] tA2
- [Begin Dec round] tA3
- [End Dec round] tA4
- [Ramp 2 Thd] Frt
- [Ramp Switch Assign] rPS
- [Acceleration 2] AC2
- [Deceleration 2] dE2
- [Dec.Ramp Adapt] brA

[+/- speed] uPd-
- [+ Speed Assign] uSP-
- [- Speed Assign] dSP-
- [Ref Frequency Save] Str

[Stop configuration] Stt-
- [Type of stop] Stt
- [Freewheel Stop] nSt
- [Freewheel stop Thd] FFt
- [Fast Stop Assign] FSt-
- [Ramp Divider] dCF
- [DC Injection Assign] dC1
- [DC Inj Level 1] idC
- [DC Inj Time 1] td1
- [DC Inj Level 2] idC2
- [DC Inj Time 2] tdC

[Auto DC injection] AdC-
- [Auto DC injection] AdC
- [Auto DC inj Level 1] SdC1
- [Auto DC inj Time 1] tdC1
- [Auto DC inj Level 2] SdC2
- [Auto DC inj Time 2] tdC2

[Jog] JoG-
- [Jog Assign] JoG-
- [Jog Frequency] JGF
- [Jog Delay] JGt

[Preset Speeds] PSS-
- [2 Preset Freq] PS2
- [4 Preset Freq] PS4
- [8 Preset Freq] PS8
- [16 Preset Freq] PS16
- [Preset Speed 2] SP2
- [Preset Speed 3] SP3
- [Preset Speed 4] SP4
- [Preset Speed 5] SP5
- [Preset Speed 6] SP6
- [Preset Speed 7] SP7
- [Preset Speed 8] SP8
- [Preset Speed 9] SP9
- [Preset Speed 10] SP10
- [Preset Speed 11] SP11
- [Preset Speed 12] SP12
- [Preset Speed 13] SP13
- [Preset Speed 14] SP14
- [Preset Speed 15] SP15
- [Preset Speed 16] SP16

[Skip Frequency] JPF
[Skip Frequency 2] JF2
[3rd Skip Frequency] JF3
[Skip Freq.Hysteresis] JFH
[Define system units] SuC-
- [P sensor unit] SuPr
- [Flow rate unit] SuFr
- [Temperature unit] SutP
- [Currency unit list] SuCu
- [Liquid Density] rHo

[PID controller] P1d-
- [PID Feedback] Fdb
  - [Type of control] toCt
  - [PID feedback Assign] P1F
  - [Min PID feedback] P1F1
  - [Max PID feedback] P1F2
  - [PID feedback] rPF
  - [Min fbk Warning] PAL
  - [Max fbk Warning] PAH
- [PID Reference] rF-
  - [Intern PID Ref] P11
  - [Ref Freq 1 Config] Fr1
  - [Min PID Process] P1P1
  - [Max PID Process] P1P2
  - [Internal PID ref] rP1
  - [Auto/Manual assign.] PAu
  - [Manual PID reference] P1M
  - [PID preset references] Pr1-
    - [2 PID Preset Assign] Pr2
    - [4 PID Preset Assign] Pr4
    - [Ref PID Preset 2] rP2
    - [Ref PID Preset 3] rP3
    - [Ref PID Preset 4] rP4
  - [Predictive Speed Ref] FP1
  - [Speed input %] PSr
- [Settings] St-
  - [PID Prop.Gain] rPG
  - [PID Intgl.Gain] r1G
  - [PID derivative gain] rdG
  - [PID ramp] PrP
  - [PID Inversion] P1C
  - [PID Min Output] PoL
  - [PID Max Output] PoH
  - [PID error Warning] PEr
  - [PID Integral OFF] P1S
  - [PID acceleration time] ACCP
  - [PID Start Ref Freq] SFS

[Sleep/Wakeup] SPW
- [Sleep menu] SLP-
  - [Sleep Detect Mode] SLPM
  - [Sleep Switch Assign] SLPW
  - [Inst. Flow Assign.] FSIA
  - [Sleep Flow Level] SLnL
  - [Sleep Pressure Level] SLPL
  - [Sleep Min Speed] SLSL
  - [Sleep Power Level] SLPr
  - [Sleep Delay] SLPd
  - [Boost] Sbt-
    - [SLeep Boost Speed] SLbS
    - [Sleep Boost Time] SLbt
  - [Advanced sleep check] AdS-
    - [Sleep Mode] ASLM
    - [Sleep Condition] ASLC
    - [Sleep Check Delay] ASLd
    - [Check Sleep Ref spd] ASLr
- [Wake up menu] WKP-
  - [Wake Up Mode] WuPM
  - [Wake Up Process level] WuPF
  - [Wake Up Process Error] WuPE
  - [Wake Up Delay] WuPd

[Threshold reached] tHrE-
- [High Current Thd] Ctd
- [Low I Threshold] CtdL
- [Motor Freq Thd] Ftd
- [Low Freq.Threshold] FtdL
- [Freq. threshold 2] F2d
- [2 Freq. Threshold] F2dL
- [Motor Therm Thd] ttd
- [Reference high Thd] rtd
- [Reference low Thd] rtdL

[Mains contactor command] LLC-
- [Mains V. time out] Lct
- [Mains Contactor] LLc
- [Drive Lock] LES

[Parameters switching] MLP-
- [2 Parameter sets] chA1
- [3 Parameter sets] chA2
- [Parameter Selection] SPS

[Stop after speed timeout] PrSP-
- [Low Speed Timeout] tLS
- [Sleep Offset Thres.] SLE

[Advanced sleep check] AdS
- [Sleep Mode] ASLM
- [Sleep Condition] ASLc
- [Sleep Check Delay] ASLd
- [Check Sleep Ref spd] ASLr

[Booster Control] bSt-
- [System Architecture] MPS-
  - [Pump System Archi] MPSA
  - [Nb Of Pumps] MPPn
  - [Pumps Configuration] PuMP-
    - [Pump 1 Cmd Assign] MPo1
    - [Pump 1 Ready Assign] MP11
    - [Pump 2 Cmd Assign] MPo2
    - [Pump 2 Ready Assign] MP12
    - [Pump 3 Cmd Assign] MPo3
    - [Pump 3 Ready Assign] MP13
    - [Pump 4 Cmd Assign] MPo4
    - [Pump 4 Ready Assign] MP14
    - [Pump 5 Cmd Assign] MPo5
    - [Pump 5 Ready Assign] MP15
    - [Pump 6 Cmd Assign] MPo6
    - [Pump 6 Ready Assign] MP16
  - [Pump Cycling Mode] MPPc
  - [Lead Pump Altern.] MPLA
  - [Altern Wait Time] MPAt
  - [Pump Auto Cycling] MPcP
  - [Pump Ready Delay] MP1d
  - [MultiPump ErrorResp] MPFb
- [Booster Control] bSc-
  - [Booster Control] bcM
  - [Stage/Destage Cond.] SdcM-
    - [Boost Working range] bcWA
    - [Booster Stg Delay] bSd
    - [Booster Dstg Delay] bdd
    - [Boost Override range] bcoA
  - [Booster S/D Interval] bSdt

4.5 [Generic monitoring] GPr-

[Stall monitoring] StPr-
- [Stall monitoring] StPc
- [Stall Max Time] StP1
- [Stall Current] StP2
- [Stall Frequency] StP3

[Therm sensor monit] MtSP-
- [AI2 Th Monitoring] th2S
- [AI2 Type] A12t
- [AI2 Th Warn Level] th2A
- [AI2 Th Error Level] th2F
- [AI2 Th Error Resp] th2b
- [AI2 Th Value] th2V
- [AI3 Th Monitoring] th3S
- [AI3 Type] A13t
- [AI3 Th Warn Level] th3A
- [AI3 Th Error Level] th3F
- [AI3 Th Error Resp] th3b
- [AI3 Th Value] th3V
- [AI4 Th Monitoring] th4S
- [AI4 Type] A14t
- [AI4 Th Warn Level] th4A
- [AI4 Th Error Level] th4F
- [AI4 Th Error Resp] th4b
- [AI4 Th Value] th4V
- [AI5 Th Monitoring] th5S
- [AI5 Type] A15t
- [AI5 Th Warn Level] th5A
- [AI5 Th Error Level] th5F
- [AI5 Th Error Resp] th5b
- [AI5 Th Value] th5V

4.6 [Error/Warning handling] CSWM-

[Fault Reset] rSt-
- [Fault Reset Assign] rSF
- [Prod Restart Assign] rPA
- [Product restart] rP

[Auto Fault Reset] Atr-
- [Auto Fault Reset] Atr
- [Fault Reset Time] tAr

[Catch on the fly] FLr-
- [Catch On Fly] FLr
- [Catch on Fly Sensitivity] Vcb

[Motor thermal monit] tHt-
- [Motor Thermal Mode] thtt
- [Motor Therm Thd] ttd
- [MotorTemp ErrorResp] oLL

[Output phase Loss] oPL-
- [OutPhaseLoss Assign] oPL
- [OutPhaseLoss Delay] odt

[Input phase loss] iPL-

[InPhaseLoss Assign] iPL
[External error] EtF-
[Ext Error assign] EtF
[Ext Error Resp] EPL
[Undervoltage handling] uSb-
[Undervoltage Resp] uSb
[Mains voltage] urES
[Undervoltage level] uSL
[UnderVolt timeout] uSt
[Stop Type PLoss] StP
[UnderV. restart tm] tSM
[Prevention level] uPL
[Max stop time] StM
[DC bus maintain time] tbS
[Ground Fault] GrFL-
[Ground Fault Activation] GrFL
[4-20 mA loss] LFL-
[AI1 4-20mA loss] LFL1
[AI2 4-20mA loss] LFL2
[AI3 4-20mA loss] LFL3
[AI4 4-20mA loss] LFL4
[AI5 4-20mA loss] LFL5
[AI Loss Inhibition] inLF
[Fallback speed] LFF-
[Fallback speed] LFF
[Error detection disable] inH-
[ErrorDetect Disable] inH
[Fieldbus Interrupt Resp] CLL-
[Modbus Error Resp] SLL
[Communication Module] CoMo-
[Fieldbus Interrupt Resp] CLL
[Tuning Error Resp] tnL
[Process underload] uLd-
[Unld T. Del. Detect] uLt
[Unld.Thr.Nom.Speed] Lun
[Unld.Thr.0.Speed] LuL
[Unld. FreqThr. Det.] rMud
[Hysteresis Freq] Srb
[Underload Mangmt.] udL
[Underload T.B.Rest.] Ftu
[Process overload] oLd-
[Ovld Time Detect.] toL
[Ovld Detection Thr.] Loc
[Hysteresis Freq] Srb
[Ovld.Proces.Mngmt] odL
[Overload T.B.Rest.] Fto
[Warning groups config] AGCF-
[Warn grp 1 definition] A1c
[Warn grp 2 definition] A2c
[Warn grp 3 definition] A3c
[Warn grp 4 definition] A4c
[Warn grp 5 definition] A5c

4.7 [Maintenance] CSMA-

[Diagnostics] dAu-
[FAN Diagnostics] Fnt
[LED Diagnostics] hLt
[IGBT Diagnostics with motor] iWt
[IGBT Diagnostics w/o motor] iWot
[Fan management] FAMA-
[Fan mode] FFM
[Time Counter Reset] rPr
[Overmodul. Activation] oVMA

5 [Communication] CoM-

[Modbus Address] Add
[Modbus baud rate] tbr
[Modbus Format] tFo
[ModbusTimeout] tto
[Com. scanner input] iCS-
[Scan. IN1 address] nMA1
[Scan. IN2 address] nMA2
[Scan. IN3 address] nMA3
[Scan. IN4 address] nMA4
[Scan. IN5 address] nMA5
[Scan. IN6 address] nMA6
[Scan. IN7 address] nMA7
[Scan. IN8 address] nMA8
[Com. scanner output] oCS-
[Scan.Out1 address] ncA1
[Scan.Out2 address] ncA2
[Scan.Out3 address] ncA3
[Scan.Out4 address] ncA4
[Scan.Out5 address] ncA5
[Scan.Out6 address] ncA6
[Scan.Out7 address] ncA7
[Scan.Out8 address] ncA8
[Profibus] Pbc-
[Address] Adrc

6 [File management] FMt-

6.1 [Transfer config file] tCF-

[Copy to the drive] oPF
[Copy from the drive] SAF

6.2 [Factory settings] FCS-

[Config. Source] FCSi
[Parameter group list] Fry-
[Go to Factory Settings] GFS
[Save Configuration] SCSi

6.3 [Firmware Update] FWuP-

[Firmware update diag] FWud-
[Firmware Update Status] FWSt
[Firmware Update Error] FWEr
[Identification] oid-
[Package version] PFu-
[Package Type] PKtP
[Package Version] PKVS
[Update Firmware] FWAP-
[Abort Firmware Update] FWCL

7 [My preferences] MyP-

7.1 [Language] LnG-

7.2 [Password] Cod-

[Password status] PSSt
[Password] PWd
[Upload rights] uLr
[Download rights] dLr

7.3 [Customization] CuS-

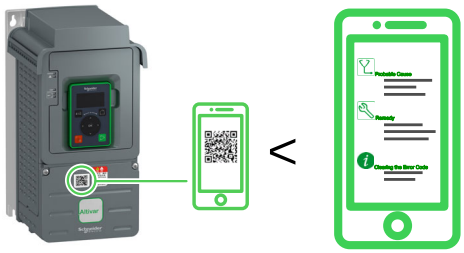
[Display screen type] MSC-
[Display value type] Mdt
[Parameter Selection] MPc

7.4 [Access Level] LAc-

[Basic] bAS
[Expert] EPr

7.5 [LCD settings] cnL-

[Screen Contrast] cSt
[Standby] Sby
[Display Terminal locked] KLCK



Troubleshooting

Scan the QR code in front of the drive to get the error codes explanations in the *Diagnostics* section.

Notes