VLC Controllers

VLC DC brushed/brushless motor controllers/drivers are designed and manufactured by SMAC. This enables SMAC to offer efficient, competitively-priced solutions with no loss in features or functionality. The product can be adjusted by SMAC to a specific design, or to market or customer needs. SMAC offers a range of single and multi-axis controllers as well as stand-alone amplifiers. Complimentary standard programming software is available. Controllers can also be programmed by mnemonic type command instructions via an RS-232 interface into NVRAM and allows code to be stored in non-volatile RAM, which is then used to enable movements to be made in three different modes. They require no supplementary software. SMAC supports connectivity with a different type of fieldbus systems such as Ethernet/IP, EtherCAT® and CANopen. Please contact us for more information.

	Part Number	Motor type	Stand-alone	Built-in	Output (Standard)	Digital input	Digital output	Analog input *	Analog output	STO (Safe Torque Off)	Commu-nication interfaces
Single Axis	VLCI-R3	brushed/ brushless		•	3.5 A cont., 6.5 A peak	4 (opto-isolated)	4 (opto-isolated)	1 Diff	1	2 In, 1 Out	RS232
	VLCI-X1		•		3.5 A cont., 6.5 A peak	4 (opto-isolated)	4 (opto-isolated)	1 Diff.	1 S.E.	2 In, 1 Out	RS232
	VLC-1-07		•		6 A cont., 7.8 A peak	8 (opto-isolated)	8 (opto-isolated)	2 Diff., 3 S.E.	3 S.E.	2 In, 1 Out	Serial (UART)
	VLC-1-13		•		10 A cont., 13 A peak	8 (opto-isolated)	8 (opto-isolated)	2 Diff., 3 S.E.	3 S.E.	2 In, 1 Out	Serial (UART)
	VLC-ETC		•		3.5 A cont., 6.5 A peak	4 (opto-isolated)	4 (opto-isolated)	1 Diff.	1 S.E.	2 In, 1 Out	Serial (UART), EtherCAT (2-ports)
	VLCI-CAN-07		•		3.5 A cont., 6.5 A peak	4 (opto-isolated)	4 (opto-isolated)	1 Diff.	n/a	2 In, 1 Out	RS232, CAN
Dual Axis	VLC-25-07		•		6 A cont., 7.8 A peak	4 (opto-isolated)	4 (opto-isolated)	2 Diff., 3 S.E.	2 S.E.	2 In, 1 Out	RS232
	VLC-25-13		•		10 A cont., 13 A peak	4 (opto-isolated)	4 (opto-isolated)	2 Diff., 3 S.E.	2 S.E.	2 In, 1 Out	RS232
	VLC-2-EIP-07		•		6 A cont., 7.8 A peak	4 (opto-isolated)	4 (opto-isolated)	2 Diff., 3 S.E.	2 S.E.	2 In, 1 Out	RS232, Ethernet/IP
	VLC-2-EIP-13		•		10 A cont., 13 A peak	4 (opto-isolated)	4 (opto-isolated)	2 Diff., 3 S.E.	2 S.E.	2 In, 1 Out	RS232, Ethernet/IP

* Diff. = Differential and S.E. = Single-Ended

VLCI-R3

VLCI-X1

VLC-1-07 / VLC-1-13

VLC-ETC

VLCI-CAN-07

VLC-25-07 / VLC-25-13

VLC-2-EIP-07/ VLC-2-EIP-13

Why Use SMAC Cables?

SMAC actuators are used in numerous high speed, high cycle applications and are guaranteed for millions of cycles. For this reason, it is imperative that the cables used to connect with our actuators are capable of similar arduous duty cycles and life span. Only cables manufactured by SMAC can be guaranteed to meet the rigorous standards required during use. Many years of experience has taught us that cheaper third party cables simply are not up to the task required. They are, in fact, one the most common causes of technical problems experienced by our customers.

	Single Axis Controller					Dual Axis Controller	
Actuator	Stand Alone				Built-in	Stand Alone	
Models	VLCI-X1	VLC-ETC	VLCI-CAN-07	VLC-1-07/13	VLCI-R3	VLC-25-07/13	VLC-2 EIP-07/13
CBL* / CTL*	VAH-6LOD26-03			VAH-4LOD26-03			
2x CBL* / CTL*						VAH-4LTD26-03	
LBL / LDL	MAH-6LOD26-03			MAH-4LOD26-03			
LDL Built-in Controller Type					MAH-VCI2626-02		
LBR	MAH-6RED026-03			MAH-4RED026-03		MAH-4RTD026-03	
LCA(S)*/ LCB/ MLA (single-pole/brushless)	VAH-6LOD26-03			VAH-4LOD26-03			
LCA (S)* (Multi-pole/brushless)	MAH-6LOD26-03			MAH-4LOD26-03			
2x LCA(S)*/ LCB/ MLA						VAH-4LTD26-03	
2x LBL* / LCA (S)* (Multi-pole/brushless)						MAH-4LTD026-03	
SLA10/ SLA25*	VAH-6LOD26-03 (SLA10 requires LAH-PT12-26 cable)			VAH-4LOD26-03			
LAL35/LAL95	VAH-6LOD26-03			VAH-4LOD26-03			
LAL55/LAL300/LAL500	VAH-6LOD-03			VAH-4LOD-03			
2x LAL35/LAL95						VAH-4LTD26-03	
2x LAL55/LAL300/LAL500						VAH-4LTD-03	
LAR35	VAH-6RED26-03 (with 2x controllers)			VAH-4RED26-03 (with 2x controllers)		VAH-4RTD26-03	
LAR31-030	MAH-6RED226-03 (with 2x controllers)			MAH-4RED226-03 (with 2x controllers)		MAH-4RTD226-03	
LAR31-050 / LAR51-058	MAH-6RED026-03 (with 2x controllers)			MAH-4RED026-03 (with 2x controllers)		MAH-4RTD026-03	
LAR55/LAR95/LAR300	VAH-6RED-03 (with 2x controllers)			VAH-4RED-03 (with 2x controllers)		VAH-4RTD-03	
LCR13/LCR16/LCR20 Under 25mm stroke	MAH-6RED226-03 (with 2x controllers)			MAH-4RED226-03 (with 2x controllers)		MAH-4RTD226-03	
LCR13/LCR16/LCR20 35mm stroke and above	MAH-6RED026-03 (with 2x controllers)			MAH-4RED026-03 (with 2x controllers)		MAH-4RTD026-03	
MGR	VAH-6RED26-03 (with 2x controllers)			CAH-4RED26-03 (with 2x controllers)		VAH-4RTD26-03	
GRP20/GRP35/GRP50***	VAH-6RED26-03 (with 2x controllers)			VAH-4RED26-03 (with 2x controllers)		VAH-4RTD26-03	
LXY15/LXY25	GRP-6RED26-03 (with 2x controllers)			GRP-4RED26-03 (with 2x controllers)		GRP-4RTD26-03	

* No cable required for flying lead option. *** Old type of GRP50 requires LAH-GRP26-03 cable.

Options & Modifications (Consult factory for availability)

Cable length ---------- 3m standard, optional 10m length is available. Consult factory for other length.

Superflex ---------- Suitable for robotic applications.

Non-SMAC controller connector ---------- Consult factory for details.