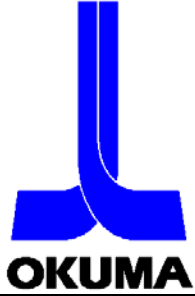
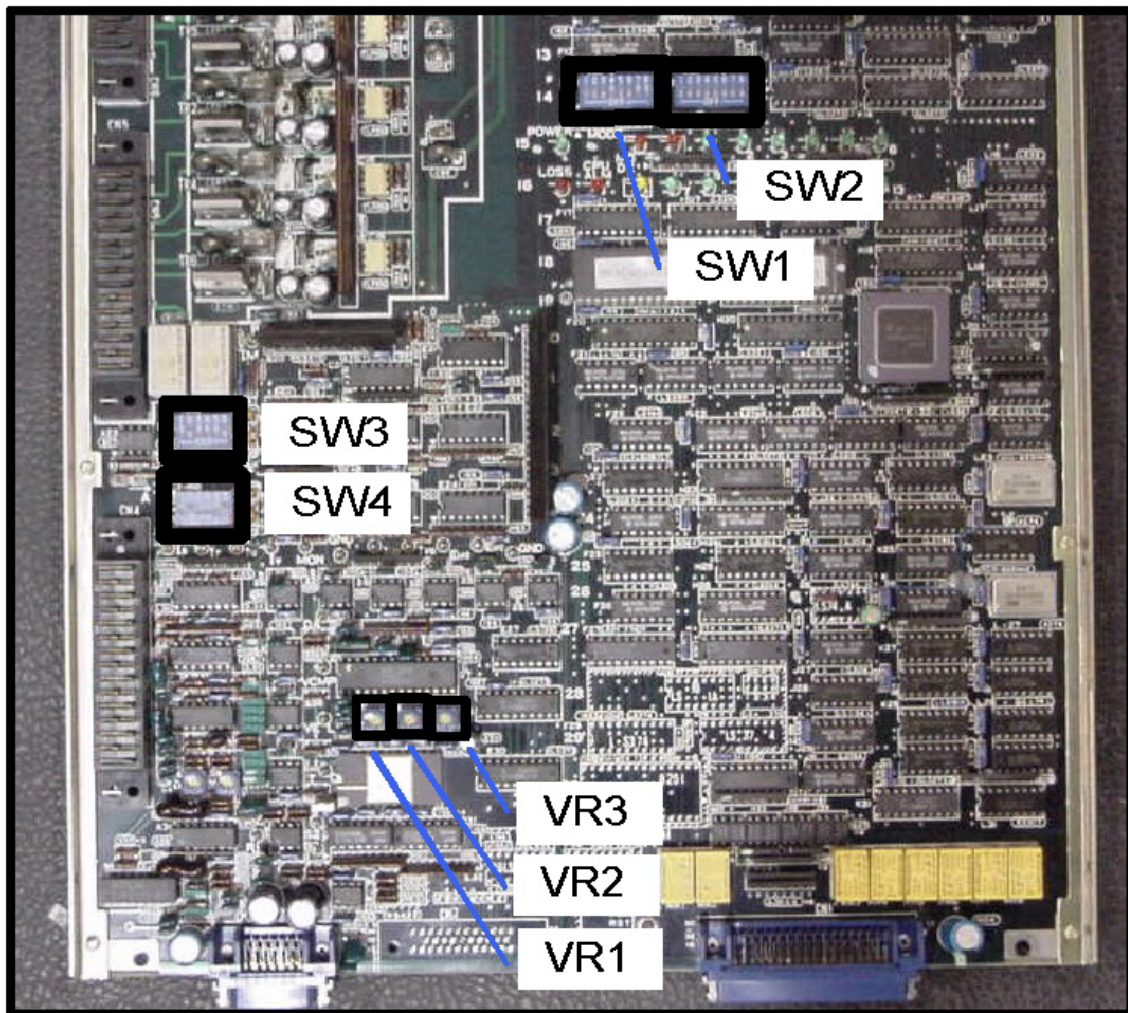


Date: 06/2/2004 Classification: OSP	Bulletin Number: SBE0132 Author: Chris Heeg	 The Okuma logo, featuring a stylized blue 'J' shape above the word 'OKUMA' in bold blue capital letters.
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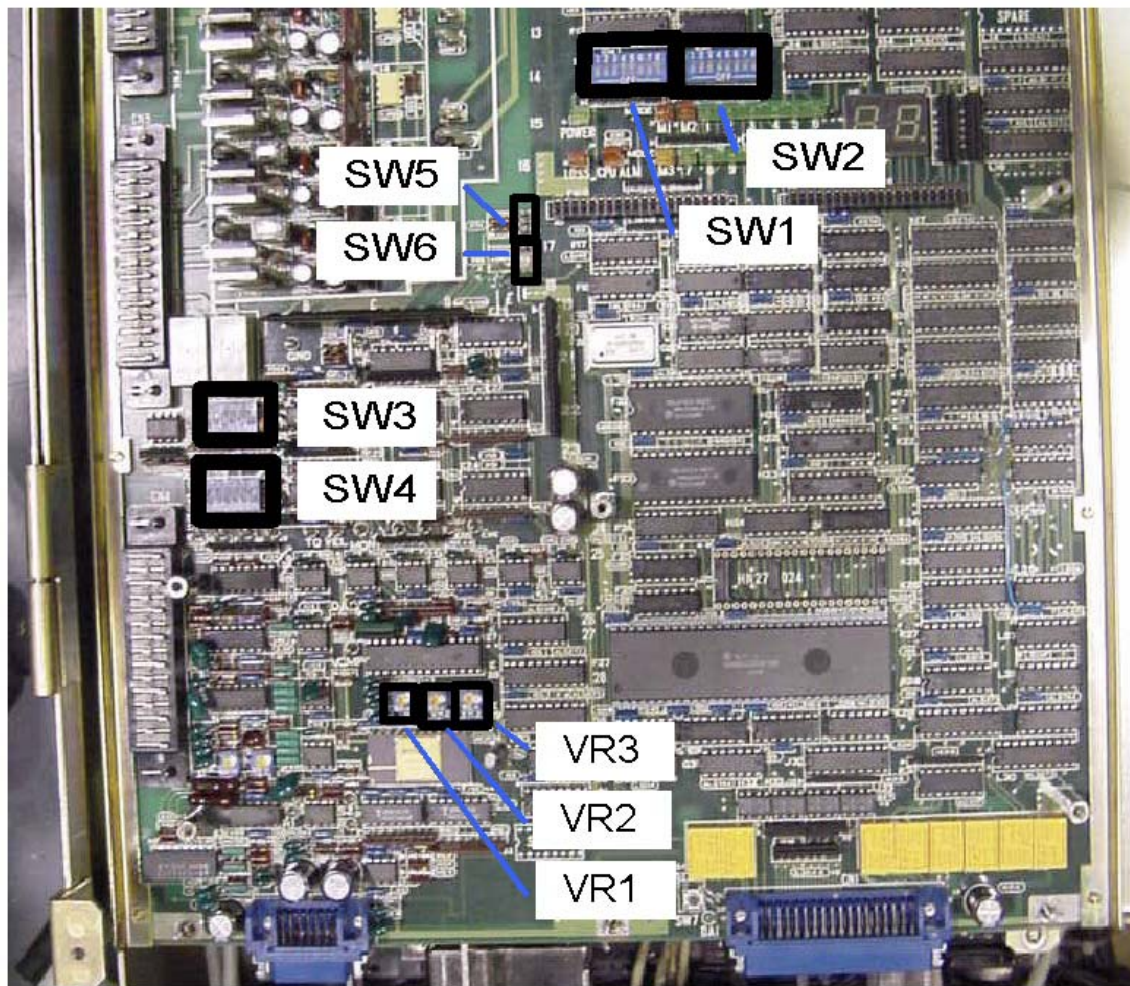
VAC I and II Switch Settings

The purpose of this bulletin is to provide the switch settings for VAC I and II spindle drives. The following table was derived from the VAC characteristics tables. Included is pictures showing the VAC board layouts with the switch locations indicated. Since VAC I could use the same board as a VAC II, note whether the machine has a VAC Card 1 on the VAC top board. If it does that the machine has a VAC II, conversely if it doesn't than the machine has a VAC I.

VAC I Board Layout



VAC I or II Board Layout



VAC Type	Machine Model	Motor Type	Output Power (KW)	Max Speed (RPM)	Drive Unit	Switches (See notes below)				Jumpers		Potentiometer (*10)		
						SW1	SW2	SW3	SW4	SW5	SW6	VR1	VR2	VR3
1	FTL		5.5/3.7	6000	D11A/1101	4,8		3,5	3,5					
1	FTL		7.5/5.5	6000	D11A/1101	4,7		1,2,4,5	1,2,4,5			0	0	0
1	GC34N	VAC-MML11/7.5R-152P	11/7.5	6000	D8A/1102	4,5,7,8		1,2,3,5	1,2,3,5			0	0	0
1	GP47N	VAC-MM22/15R-112P	22/15	4500	D22A/1102	6,8		4,5	4,5			0	0	0
1	GP47N	VAC-MM15/11R-152P1	15/11	6000	D11A/1101	5,7,8		1,4,5	1,4,5			0	0	0
1	GP56N	VAC-MM22/15R-112P	22/15	4500	D22A/1101	6,8		4,5	4,5			0	0	0
1	GP57N	VAC-MM22/15R-112P	22/15	4500	D22A/1102 or 1104	6,8		4,5	4,5			0	0	0
1	GP67N	VAC-MM15/11R-152P1	15/11	6000	D11A/1102	5,7,8		1,4,5	1,4,5			0	0	0
1	GP67N	VAC-MM22/15R-112P	22/15	4500	D11A/1102	6,7		4,5	4,5			0	0	0
2	LAW2S	MB55/45-20/30	55/45		D45A			4,5	4,5	2,3				
2	LAWS	VAC-YMM55/45R-112	55/45	3500	D37A/1105			1,2,4,5	1,2,4,5			0	0	0
2	LAWS/LR35AW	VAC-YMM55/45R-112	55/45	3500	D45A/1109			3,4,5	3,4,5	2,3		0	0	0
1	LB12	VAC-MM7.5/5.5R-7.55F	7.5/5.5	6000	D11A/1101 or D11/1100	6,7,8		1,4,5	1,4,5			0		
1	LB12	VAC-MM7.5/5.5R-7.55-R1	7.5/5.5	6000	D11A/1101	5,6,7,8		2,4,5	2,4,5			0	0	0
1	LB12	VAC-MML15/11R-155	15/11	6000	D11A/1102	3,7,8		1,2,4,5	1,2,4,5			0	0	0
1	LB15	VAC-MML11/7.5R-156C-R1	11/7.5	6000	D8A/1102	3,5,6,7	2,3	1,2,3,5	1,2,3,5			0	0	0
1	LB15/Cadet	VAC-MML11/7.5R-156-R1	11/7.5	6000	D8A/1101 or 1102	4,5,7,8	2,3	1,2,3,5	1,2,3,5			0	0	0
1	LB15/Cadet	VAC-MML7.5/5.5R-156C	7.5/5.5	6000	D8A/1101 or 1102	4,5,6	2,3	1,5	1,5			0	0	0
2	LB15II	SP-11198	22/15	3800	D22A/1104			1,2,4,5	1,2,4,5			0	0	0
2	LB15II	SP-10257B	15/11	4500	D11A/1104			1,2,4,5	1,2,4,5			0	0	0
2	LB15II	VAC-MFL3.7/2.2R-151	3.7/2.2	8000	D6A/1104			1,5	1,5			0	0	0
1	LB25	VAC-MM30/22R-082W	15/11	6000	D22A/1101	4,7,8		1,3,4,5	1,3,4,5			0	0	0
2	LB35II	VAC-YMM30/22R-082	30/22	6000	D22A/1104			1,3,4,5	1,3,4,5			0	0	0
1	LB35II	VAC-YMM37/30R-082W	37/30	6000	D30A/1108 or 1109	4,6		1,4,5	1,4,5	2,3	1,2			
2	LB45II	YMM45/37R-112			D45A			3,4,5	3,4,5	2,3				
2	LB45II	YMML37/30R-112-R1		2800	D45A			2,4,5	2,4,5	2,3				
1	LB9	VAC-MML11/7.5R-152-R1	11/7.5	6000	D11A/1102	3,5,6,7		1,2,3,5	1,2,3,5			0	0	0
1	LB9	VAC-MM11/7.5R-152	11/7.5	6000	D11A/1101 or D11/1100	5,7		1,2,5	1,2,5			0		
1	LB9	VAC-MML11/7.5R-152	11/7.5	6000	D11A/1102	4,5,7,8		1,2,3,5	1,2,3,5			0	0	0
1	LC20	VAC-MML22/18.5-159-R1	22/18.5	6000	D22A/1104	3,4,7,8		1,2,4,5	1,2,4,5	2,3	1,2			
1	LC20	VAC-MM11/7.5R-152	11/7.5	6000	D11A/1101 or D11/1100	7,8		1,2,5	1,2,5			0		
1	LC40-M-ATC	VAC-MFL5.5/3.7R-153	5.5/3.7	6000	D6A/1102	3,8		4,5	4,5			0	0	0
2	LC50	YMM45/37R-112		1500	D45A			3,4,5	3,4,5	2,3				
2	LFS35/LAWF	MB55/45-20/30			D30A			2,4,5	2,4,5	2,3	1,2			
1	LH35N	VAC-MM22/15R-112-R1	22/15	4500	D22/1100	6,8		4,5	4,5			0		
1 or 2	LH55N	VAC-YMM45/37R-112	45/37	4500	D37A/1103 or 1105	4,5,8		3,4,5	3,4,5	2,3		0	0	0
1 or 2	LH55N	VAC-MM22/15R-112	22/15	4500	D22A/1102 or 1104	6,8		4,5	4,5			0	0	0
1	LP15	VAC-MML7.5/5.5R-152	7.5/5.5	6000	D8A/1102	4,5,6		1,5	1,5			0	0	0
1	LPC4	VAC-MB3.7/2.20-200	3.7/2.2	8000	D3/1100			1,3,5	1,3,5			0		
1	LPC4	VAC-MB2.2/1.50-200	2.2/1.5	8000	D3/1100			2,5	2,5			0		

VAC Type	Machine Model	Motor Type	Output Power (KW)	Max Speed (RPM)	Drive Unit	Switches (See notes below)				Jumpers		Potentiometer (*10)		
						SW1	SW2	SW3	SW4	SW5	SW6	VR1	VR2	VR3
1	LR10	SP-7725B	7.5/5.5	6000	D11A/1101	4,8		3,5	3,5					
1	LR10		7.5/5.5	6000	D11A/1102	4,7		1,2,4,5	1,2,4,5			0	0	0
2	LR10	VAC-MFL3.7/2.2R-152	3.7/2.2	8000	D6A/1104			1,5	1,5					
2	LR10MW	VAC-MFL5.5/3.7R-157	5.5/3.7	8000	D6A/1104			4,5	4,5			0	0	0
1	LR15	UAASKX-30 COK11	15/11	6000	D22A/1101	4		1,3,4,5	1,3,4,5					
1	LR15	VAC-MM15/11R-155F	15/11	6000	D22/1100	5		1,3,5	1,3,5			0		
1	LR15	VAC-MM22/15R-122	22/15	4500	D22/1100	6,8		4,5	4,5			0		
1	LR15	SP-7725B	5.5/3.7	6000	D11A/1102	4,8		3,5	3,5			0	0	0
1	LR15	VAC-MM15/11R-155F	15/11	6000	D11/1100	6,7,8		1,4,5	1,4,5			0		
1	LR15		7.5/5.5	6000	D11A/1102	4,7		1,2,4,5	1,2,4,5			0	0	0
1	LR25	VAC-YMM37/30R-082W	37/30	6000	D30A/1108 or 1109	4,6		1,4,5	1,4,5	2,3	1,2			
1	LR25	VAC-MM22/15R-125	22/15	4500	D22/1100	6,8		4,5	4,5					
1	LR25	VAC-MM30/22R-125	30/22	4500	D22/1100	6,7		3,4,5	3,4,5					
1	LR25	VAC-YMM45/37R-112	45/37	4500	D37A/1103	4,5,8		3,4,5	3,4,5			0	0	0
1 or 2	LR25	VAC-YMM37/30R-082W	37/30	6000	D37A	4,6		2,3,5	2,3,5			0	0	0
1	LR25	VAC-MML37/30-062	37/30	6000	D37A/1103	4,6,8		1,3,5	1,3,5			0	0	0
1	LR25	VAC-YMM45/37R-112	45/37	4500	D37A/1103	4,5,8		3,4,5	3,4,5			0	0	0
2	LR25M	VAC-YMM37/30-082W	37/30	6000	D37A/1105			2,3,5	2,3,5	2,3		0	0	0
2	LR25MATCY	VAC-MFL3.7/2.2R-152	3.7/2.2	8000	D6A/1104			1,5	1,5			0	0	0
1 or 2	LR35	VAC-YMM37/30R-112	37/30	4500	D37A or D45A/1103 or 1105	4,5		2,4,5	2,4,5	2,3		0	0	0
1	LR35	VAC-MM30/32-112-R1	30/22	4500	D22A/1102	6,7		3,4,5	3,4,5			0	0	0
1	LR35	VAC-YMM45/37R-112	45/37	4500	D37A/1103	4,5,8		3,4,5	3,4,5			0	0	0
1 or 2	LR35	VAC-YMM45/37R-112	45/37	4500	D37A/1105	4,5,8		3,4,5	3,4,5	2,3		0	0	0
1	LR35M	VAC-MF5.5/3.7R-152	5.5/3.7	6000	D6A/1101	8		1,3,5	1,3,5			0	0	0
1	LR35M/LAW-RM	VAC-MF5.5/3.7R-152	5.5/3.7	6000	D6A/1104	3,4,7		1,3,5	1,3,5			0	0	0
1 or 2	LR45	VAC-YMM45/37R-112	45/37	4500	D37A/1105	4,5,8		3,4,5	3,4,5	2,3		0	0	0
1	LR45M	VAC-MF7.5/5.5R-152	7.5/5.5	6000	D8A/1101	7		1,2,4	1,2,4			0	0	0
1 or 2	LR45-M-ATC-Y	VAC-MFL7.5/5.5R-151	7.5/5.5	8000	D8A/1102 or 1104	4,5,6		1,5	1,5			0	0	0
1	LS30N	VAC-MM11/7.5R-153	11/7.5	6000	D11A/1101 or D11/1100	7,8		1,2,5	1,2,5			0		
1	LS30N	VAC-MM15/11R-152	15/11	6000	D11A/1101 or D11/1100	6		1,4,5	1,4,5			0		
1	LS30N	VAC-MML11/7.5R-152-R1	11/7.5	6000	D11A/1102	3,5,6,7		1,2,3,5	1,2,3,5			0	0	0
1	LS30N	VAC-MML11/7.5R-112	11/7.5	6000	D11A/1102	4,5,7,8		1,2,3,5	1,2,3,5			0	0	0
2	LT15	SP-10257B	15/11	4500	D11A/1104			1,2,4,5	1,2,4,5					
2	LT15M	VAC-MFL3.7/2.2R-152	3.7/2.2	6000	D6A/1104			1,5	1,5					
2	LU25	YMM37/30R-082W			D30A			1,4,5	1,4,5	2,3	1,2			
2	LU35	YMM37/30R-082W			D45A			2,4,5	2,4,5	2,3				
2	LU35	YMM37/30R-082W			D30A			1,4,5	1,4,5	2,3	1,2			
2	LU45	YMML37/30R-112-R1			D45A			2,4,5	2,4,5	2,3				
2	LU45	YMM45/37R-112		2800	D45A			3,4,5	3,4,5	2,3				
2	LU45	YMM55/45R-112	55/45		D45A			3,4,5	3,4,5	2,3				

VAC Type	Machine Model	Motor Type	Output Power (KW)	Max Speed (RPM)	Drive Unit	Switches (See notes below)				Jumpers		Potentiometer (*10)		
						SW1	SW2	SW3	SW4	SW5	SW6	VR1	VR2	VR3
2	MacTurn50	YMM37/30R-082W			D30A			1,4,5	1,4,5	2,3	1,2			
1	MC30VA	VAC-MF7.5/5.5R-753-R1	7.7/5.5	6000	D8A/1101 or 1102	5,6	1	2,5	2,5			0	0	0
1	MC30VA	VAC-MFL7.5/5.5-7.53	7.5/5.5	6000	D8A/1102	3,6,8	1,2	1,3,5	1,3,5			2	0	0
1	MC3VA	VAC-MF7.5/5.5R-753-R1	7.5/5.5	6000	D8A/1101 or D8/1100	5,6	1	2,5	2,5			3	0	0
1	MC3VA	VAC-MF7.5/5.5-7.52	7.5/5.5	6000	D8A/1101 or D8/1100	5,8		2,5	2,5			3	0	0
2	MC400H	SP11192	15/11	12000	D22A/1104/1106			3,5	3,5	1,2		0	0	0
2	MC400H	SP-10599	11/7.5	7000	D22A/1104			2,5	2,5	1,2		0	0	0
2	MC400H	SP-9487C	11/7.5	7000	D22A/1104			1,3,5	1,3,5	1,2		0	0	0
2	MC400H	SP-10700	11/7.5	7000	D22A/1104			1,3,5	1,3,5	1,2				
1	MC40H	VAC-MF11/7.5R-152	11/7.5	6000	D11A/1101 or D11/1100	5,7		1,2,5	1,2,5			0		
2	MC40VA	VAC-MB7.5/5.5-8/150	7.5/5.5	15000	D8A/1104			2,3,5	2,3,5	1,2		0	0	0
2	MC40VA	VAC-MFL7.5/5.5R-153	7.5/5.5	6000	D8A/1104			1,5	1,5			0	0	0
2	MC40VB	VAC-MFL7.5/5.5R-753	7.5/5.5	6000	D8A/1104			1,3,5	1,3,5			0	0	0
1	MC4VA	VAC-MF7.5/5.5R-152	7.5/5.5	6000	D8A/1101 D8/1100	7		1,2,4	1,2,4			0		
1	MC4VA	VAC-MF5.5/3.7R-152	5.5/3.7	6000	D6A/1104	3,4,7		1,3,5	1,3,5			0	0	0
1	MC4VA	VAC-MF5.5/3.5R-152	5.5/3.7	6000	D6/1100	8		1,3,5	1,3,5			0		
1	MC4VB	VAC-MF7.5/5.5R-152	7.5/5.5	6000	D8A/1101	7	2	1,2,4	1,2,4			1.8	0	0
2	MC500/MC600H	MF-22/18.5R-153KR5	22/18.5		D22A			2,4,5	2,4,5					
2	MC500H	SP10787	15/11	12000	D22A/1104			3,5	3,5	1,2		0	0	0
1	MC500H/MC600H	VAC-YMF22/15-153K	22/15	6000	D22A/1101	5,6,7		2,4,5	2,4,5			0	0	0
1	MC50H	VAC-MF11/7.5R-153	11/7.5	6000	D11A/1101 or D11/1100	5,7		1,2,5	1,2,5			0		
1	MC50H	VAC-MF15/11R-153	15/11	6000	D11A/1101 or D11/1100	5,7,8		1,4,5	1,4,5			0		
1	MC50H/60H	VAC-MF22/15R-152	22/15	6000	D22A/1101	5,6,7		2,4,5	2,4,5			0	0	0
2	MC50VA	VAC-MFL15/11R-153	15/11	6000	D11A/1104			1,2,4,5	1,2,4,5			0	0	0
1	MC5VA	VAC-MF11/7.5R-152	11/7.5	6000	D11A/1101 or D11/1100	5,7		1,2,5	1,2,5			0		
1	MC60H	VAC-MF11/7.5R-153	11/7.5	6000	D11A/1101 or D11/1100	5,7		1,2,5	1,2,5			0		
1	MC60H	VAC-MF15/11R-153	15/11	6000	D11A/1101 or D11/1100	5,7,8		1,4,5	1,4,5			0		
1	MC60VA	VAC-YMM22/15R-153K	22/15	6000	D22A/1101	5,6,7		2,4,5	2,4,5			0	0	0
1	MC6VA	VAC-MF15/11R-153	15/11	6000	D11A/1101 or D11/1100	5,7,8		1,4,5	1,4,5			0		
1	MC6VA	VAC-MF15/11R-153	15/11	6000	D22A/1101 or D22/1100	5,6,8	1	1,3,5	1,3,5			0	0	0
2	MC800H	VAC-MF22/15R-113K	22/15	4500	D22A/1104			4,5	4,5					
2	MC800H	VAC-YMF30/22R-113R	30/22	4500	D22A/1104			2,3,4,5	2,3,4,5			0	0	0
1	MC80H	VAC-MF15/LR-153	15/11	6000	D11A/1101 or D11/1100	5,7,8		1,4,5	1,4,5			0		
1	MCM/MCR	VAC-YMF30/22R-113R	30/22	4500	D22A/1102	4,5,6,8		2,3,4,5	2,3,4,5			0	0	0
2	MCMB	VAC-YMF22/18.5R-153KR2	22/18.5	6000	D22A/1104			2,4,5	2,4,5			0	0	0
1 or 2	MCR	VAC-YMF45/37-113	45/37	4500	D45A/1108 or 1109	3,5,8		3,4,5	3,4,5	2,3		0	0	0
1	MCR	VAC-YMF37/30R-113	37/30	4500	D45A/1103 or 1105	4,5		2,4,5	2,4,5	2,3		0	0	0
2	MCRA	YMB-26/22-3.4/100		4000/6000	D30A			1,4,5	1,4,5	2,3	1,2			
1	MCRB	VAC-MF30/22R-113	30/22	4500	D22A/1101	6,7		3,4,5	3,4,5			0	0	0
1	MCRB	VAC-MF22/15R-113	22/15	4500	D22A/1101 or D22/1100	6,8		4,5	4,5			0	0	0

VAC Type	Machine Model	Motor Type	Output Power (KW)	Max Speed (RPM)	Drive Unit	Switches (See notes below)				Jumpers		Potentiometer (*10)		
						SW1	SW2	SW3	SW4	SW5	SW6	VR1	VR2	VR3
1	MCRB-HS	VAC-MFL15/11R-153-R3	15/11	6000	D22A/1104	3,4		1,3,5	1,3,5	2,3	1,2			
2	MCRBII	VAC-YMF30/22R-113-R	30/22	4500	D22A/1104			2,3,4,5	2,3,4,5			0	0	0
2	MCRBII	YMB25/22-3.4/100		10000	D45A			2,3,5	2,3,5	2,3				
2	MCRBII	MB30/22-2.9/80		8000	D30A			2,4,5	2,4,5	2,3	1,2			
2	MCRBII	YMB26/22-3.4/100		10000	D45A			4,5	4,5	2,3				
2	MCRBII	YMB26/22-3.4/100		10000	D45A			2,3,5	2,3,5	2,3				
2	MCRBII	VAC-YMB26/22-3.4/100		10000	D30A			2,3,5	2,3,5	2,3	1,2			
1	MCR-HS	VAC-MF15/11R-123HS	15/11	8000	D22A/1101			2,4,5	2,4,5			0	0	0
1	MCR-HS	VAC-MF15/11R-123HS	15/11	10000	D22A/1102			2,4,5	2,4,5			0	0	0
1	MCVA	VAC-YMF22/18.5R-153	22/18.5	4500	D22A/1104	3,4,6		2,4,5	2,4,5			0	0	0
1	MCVA	VAC-YMF22/18R-153	22/18.5	6000	D22A/1101	5,6,7		2,4,5	2,4,5			0	0	0
1	MCVB/MDBB	VAC-YMF30/22R-113R	30/22	4500	D22A/1101	4,5,6,8		2,3,4,5	2,3,4,5			0	0	0
2	VR40	SP-11041B	5.5/3.7	8000	D6A/1104			1,4,5	1,4,5			0	0	0
2	VR40	SP12057	5.5/3.7	12000	D8A/1104			3	3	1,2		0	0	0

Notes about switch settings

1. If VAC2 all switches on SW1 and SW2 are off. (VAC Card 1)
2. The numbers given are the dips that need to be on.