#### Loss Prevention Certification Board



# This is to certify

Armstrong Integrated Systems Limited
Mucklow Hill, Halesowen, West Midlands B62 8DJ UK

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix.

Pumps for Automatic Sprinkler Installations (refer to attached appendix for details)

which have complied with the requirements of the following:

LPS 1131 - Requirements and Testing Methods for Pumps for Automatic Sprinkler Installation Pump Sets

Certificate No.

197a

Issue No. 01

Date of Issue

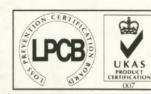
1 March 2007

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Signed on behalf of the LPCB

Name: B W Lywood



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# Loss Prevention Certification Board



#### APPENDIX TO CERTIFICATE NO. 197a

### **Armstrong Integrated Systems Limited**

Product Name	Туре	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req.= 5.38m)	Rated Head (bar) (at NPSH req.= 5.38m	Closed Valve Head (bar)	LPCB Ref. No.
4030 FP 8x5x111/2	Direct coupled end suction	200/125	292	2900	7450	7.5	10	197a/01
	0110 000001		241	2900	7000	3.8	6.8	
			292	2900*	7450	7.5	10	
			292	1450*	4800	1.6	2.3	
4030FP 6x4x10	Direct coupled end suction	150/100	259*	2900	7680	5.3	8.6	197a/02
			205*	2900	5280	3.6	4.8	
			259	2900°	7680	5.3	8.6	
			259	1450*	3120	1.6	2.1	
4030 FP(1) 4x3x81/2	Direct coupled end suction	100/80	224	2900	3360	3.4	6.3	197a/03
4030 FP 4x3x81/2			175	2900	2460	1.9	3.9	
4030FP 3x2x6	Direct coupled end suction	80/50	157	2900	1300	1.2	2.9	197a/04
			113	2900	750	0.9	1.5	
4020 FP(1) 4×3×8½	Close coupled end suction	100/80	224	2900	3360	3.4	6.3	197a/05
			175	2900	2460	1.9	3.9	
4020 FP 8x5x111/2	Close coupled end suction	200/125	292	2900	7450	7.5	10	197a/06
			241	2900	7000	3.8	6.8	
			292	2900°	7450	7.5	10	
			292	1450*	4800	1.6	2.3	
4020FP 6x4x10	Close coupled end suction	150/100	259*	2900	7680	5.3	8.6	197a/07
	3113 541511311		205*	2900	5280	3.6	4.8	
			259	2900*	7680	5.3	8.6	
			259	1450°	3120	1.6	2.1	
4020FP 3x2x6	Close coupled end suction	80/50	157	2900	1300	1.2	2.9	197a/08
	end sucudi		113	2900	750	0.9	1.5	

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#### APPENDIX TO CERTIFICATE NO. 197a

### **Armstrong Integrated Systems Limited**

Product Name	Type	Suction Inlet Diameter/ Discharge Outlet Diameter (mm)	Impeller Diameter (mm)	Rated Speed (rev/min)	Rated Flow (L/min) (at NPSH req.=	Rated Head (bar) (at NPSH req.=	Closed Valve Head (bar)	LPCB Ref. No
10115 0 0 10	Direct Occasion	200452	205	2000	5.38m) 9050	5.38m 8.1	11.1	197a/09
40MF 8x6x13 LPC (2),(3) & (4)	Direct Coupled End Suction	200/150	295	2900	9050	0.1	11.1	197 arus
			279	2900	8850	7.2	9.8	
			330	2600	10430	6.8	10.7	
			273	2600	9850	4.2	7.5	
40MF 6x5x13 PLC(2),(3) & (4)	Direct Coupled End Suction	150/125	295	2900	7700	8.5	12.0	197a/1
			250	2900	7700	4.8	8.6	
			330	2600	8000	8.7	12.1	
			250	2600	7500	303	6.9	
40MF 5x4x11.5 LPC(2),(3) & (4)	Direct Coupled End Suction	125/100	292	2900	5750	7.9	10.9	197a/1
	Life Saction		241	2900	5100	4.5	7.4	
			292	2600	5850	5.4	8.8	
			241	2600	4825	303	5.9	

<sup>\*</sup>These pumps are approved with impeller diameters and, where applicable, speeds within the ranges shown, to provide flows and heads within those ranges.

- Maximum working pressure: 10 bar. The above pumps are fitted with 'closed head' relief valve Part No. UKDO 5493 145 Issue A.
   This pump is fitted with 'closed head' relief valve Part No. UKDO5286-204.
- Pump configurations which generate a closed valve head exceeding 10 bar are approved for use in accordance with TB13:1990:1 -High rise sprinkler systems.
- Maximum working pressure: 12 bar.

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