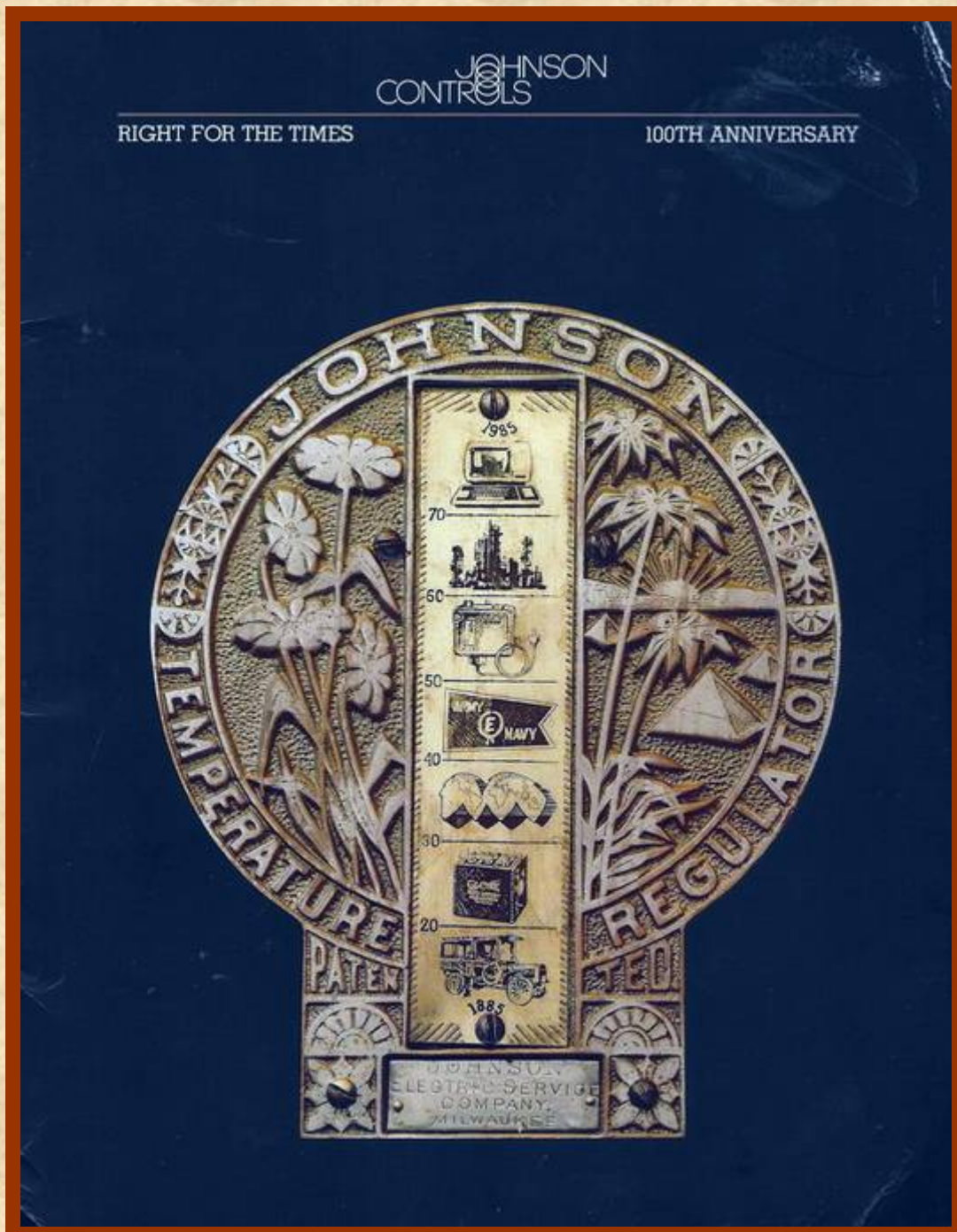


# CIBSE HERITAGE GROUP

## AUTOMATIC CONTROLS: REFERENCES





# References

1. British Standard 1523, Glossary of Terms used in Automatic Controlling and Regulating Systems, Section 1. Process and Kinetic Control. British Standards Institution, London, 1954.
2. *ibid.*, Section 5, Components of servo-mechanisms.
3. *Automatic Control Terminology*, American Society of Mechanical Engineers, 1954.
4. K.L. CHIEN, J.A. HRONES and J.B. RESWICK, 'On the Automatic Control of Passive Systems,' *Trans. ASME*, 74, 1952, pp. 175–85.
5. E. HECK, 'Regelkreise in der Klimatechnik und ihre Stabilisierung,' *Heizung-Lüftung-Haustechnik* 15, 1964, April, pp. 125–9.
6. B. JUNKER, 'Die regeltechnischen Grundlagen der Anwendung selbsttätiger Regler in der Heizung- und Klimatechnik' *Heizung-Lüftung-Haustechnik*, 7, 1956, no. 11, pp. 177–86. An English version of this text is obtainable as *Sauter Bulletin*, no. 12-Re.
7. B. JUNKER, 'Die Regelgenauigkeit bei Klimaregelungen,' *Technische Rundschau*, 51, 1959, no. 24. An English version of this text is obtainable as *Sauter Bulletin* no. 20-Re.
8. JURGES, as quoted in Recknagel-Sprenger, *Taschenbuch für Heizung, Lüftung und Klimatechnik*, p. 106, 53rd impression, R. Oldenburg, München, 1964.
9. L. KOPP, *Die Wasserheizung*, Springer Verlag, Berlin, 1958.
10. J. KROMWIJK, 'Het gedrag van graduele temperatuurregelaars in installaties voor verwarming en ventilatie,' *Verwarming en Ventilatie*, April 1954, pp. 157–70.
11. F. PIWINGER, *Regelungstechnik für Praktiker*, VDI-Verlag Düsseldorf, 1966.
12. M. SYRBE, 'Über die optimale Einstellung von Reglern auf Grund geometrischer Daten der Regelstrecken-Frequenzgänge' *Regelungstechnik*, 1, 7, p. 160.
13. W.H. WOLSEY, *Control Valves*, Hutchinson Educational (in preparation).
14. J.G. ZIEGLER and N.B. NICHOLS, 'Optimum Settings for Automatic Controllers,' *Trans. ASME*, 1942, p. 759.
15. J.G. ZIEGLER, 'Cascade control systems,' *Canadian Chemical Processing*, October 1955.'



## 9.21. REFERENCES

1. KAPLAN, F., Nomograph Solves Valve Sizing Formulas for Saturated Steam, *Heat. Pip. Air Condit.*, **36**, (9), 151 (1964).
2. KAPLAN, F., Nomograph Solves Valve Sizing Formulas for Liquid Flow, *Heat. Pip. Air Condit.*, **36**, (8), 135 (1964).
3. KAPLAN, F., Nomograph Sizes Valves for Handling Compressible Fluids, *Heat. Pip. Air Condit.*, **36**, (12), 145 (1964).
4. CARLSON, G. E., Flow Balance in Hydronic Systems, *Air Condit. Heat. Vent.*, **62**, (9), 71 (1965).
5. ALYES, H., and JANISSE, N., Matching Damper to System by Damper Characteristics, *Air. Condit. Heat. Vent.*, **60**, (12), 31 (1963).
6. ALYES, H., and JANISSE, N., The Right Size Damper, *Air Condit. Heat. Vent.*, **61**, (2), 43 (1964).
7. ALYES, H., and JANISSE, N., Adapting Damper to System, *Air Condit. Heat. Vent.*, **61**, (3), 82 (1964).
8. A Damper is a Control Device, *Heat. Pip. Air Condit.*, **36**, (4), 112 (1964).
9. DUNN, G. W., An In-Depth Look at Electric Heating Controls, *Heat. Pip. Air Condit.*, **39**, (1), 184 (1967).
10. Control Systems in Buildings Today, *Heat. Pip. Air Condit.*, **39**, (7), 153 (1967).
11. Hospital's New Centre Controls Systems a Mile Away, *Heat. Pip. Air Condit.*, **37**, (4), 89 (1965).
12. SAGE, S. J., Centralized Control of Heating and Air Conditioning Services, reprint from *Heating and Air Conditioning* (July 1964).
13. AUSTIN, R. E., and JACKSON, T. B., Centralized Supervision of Building Services, reprint from *Heating and Ventilating Engineer* (July and Aug. 1964).
14. BLUM, H., Computers for Building Management, *Air Condit. Heat. Vent.*, **63**, (11), 50 (1966).
15. Computer Control for Environmental Systems, *Heat. Pip. Air Condit.*, **37**, (8), 93 (1965).
16. LAAKANIENIN, R. N., Two Pure Fluid Amplifying Elements, *Am. Soc. Heat. Refrig. Air-Condit. Engrs JI*, **8**, (1), 102 (1966).
17. Fluidics, *Life Magazine* (Atlantic edn.), 54 (Nov. 1967).
18. CHAPMAN, W., Fluidics—Growing Pains Slow its Progress, *Am. Soc. Heat. Refrig. Air-Condit. Engrs JI*, **9**, (9), 47 (1967).
19. Control of Electric Heating, *Air Condit. Heat. Vent.*, **63**, (7), 7 (1966).
20. MACKAY, A. A., New Pumping Concept for Industry through Solid-State Control, *Heat Pip. Air Condit.*, **38**, (2), 89 (1966).

## FURTHER READING

- MILES, V. C., *Thermostatic Control*, Newnes, London, 1965.
- TAYLOR, F. M. H., Electronic Controls for Heating and Ventilating, Part I: Electronic Control Theory, *J. Instn Heat. Vent. Engrs*, **25**, 277 (1958); Part II: The Selection of Control Applications, *J. Instn Heat. Vent. Engrs*, **26**, 52 (1958).
- TAYLOR, F. M. H., and CHAMPION, C. L., The Control of Heating and Ventilating Systems, *J. Instn Heat. Vent. Engrs*, **27**, 359 (1960).
- BROWN, G. F., Application of Pneumatic Controls to Air Conditioning, *J. Instn Heat. Vent. Engrs*, **28**, 405 (1961).
- POWELL, D. H., Basic Principles of Control Applications, *J. Instn Heat. Vent. Engrs*, **29**, 353 (1962).



- CONSTANCE, J. D., Sizing Steam Control Valves, *Air Condit. Heat. Vent.*, **62**, (1), 81 (1965).
- HAINES, J. E., *Automatic Control of Heating and Air Conditioning* (2nd edn.), McGraw-Hill, New York, 1961.
- Automatic Control, Chap. 13 in Am. Soc. Heat. Refrig. Air-Condit. Engrs Guide and Data Book *Fundamentals and Equipment*, 1963.
- Engineering Manual of Automatic Control*, Honeywell Controls Ltd (formerly Minneapolis-Honeywell Regulator Co.), 1958.
- Control Valve Selection*, File No. 77-5101, Honeywell Controls Ltd, USA (Jan. 10, 1957).
- Manual of Application* (3rd edn.), Satchwell Controls Ltd, 1961.
- Control of Steam Coils for Heating and Air Conditioning*, Data Sheet 8511.
- Control of Water Systems for Heating and Air Conditioning*, Data Sheet 8510.
- Hot Water Control Valves*, Data Sheet 9775, Barber and Colman Ltd (Jan. 1963).
- The Supervisory Data Center*, File No. 77-0111, Honeywell Controls Ltd USA (Nov. 15, 1956).
- RAMSEY, M. A., *Tested Solutions to: Design Problems in Air Conditioning and Refrigeration*, Industrial Press Inc., New York, 1966.
- RAMSEY, M. A., Interior Design, *Air Condit. Heat. Vent.*, **63**, (1), 77 (1966).
- RAMSEY, M. A., Interior Control—the Next Step, *Air Condit. Heat. Vent.*, **63**, (3), 89 (1966).
- RAMSEY, M. A., Interior Space—Variable Load, *Air Condit. Heat. Vent.*, **63**, (5), 114 (1966).
- RAMSEY, M. A., On/Off Control of Air Conditioning Systems, *Air Condit. Heat. Vent.*, **63**, (9), 93 (1966).
- RAMSEY, M. A., On/Off Control with Intermittent Refrigeration, *Air Condit. Heat. Vent.*, **63**, (10), 95 (1966).
- RAMSEY, M. A., On/Off Control Using Less Coil, *Air Condit. Heat. Vent.*, **63**, (11), 85 (1966).
- RAMSEY, M. A., On/Off Face Control Can Fulfil Some Requirements, *Air Condit. Heat. Vent.*, **63**, (12), 57 (1966).
- RAMSEY, M. A., On/Off Control Methods that do the Job, *Air Condit. Heat. Vent.*, **64**, (2), 71 (1967).
- RAMSEY, M. A., Simple Reheat Coil, *Air Condit. Heat. Vent.*, **64**, (3), 103 (1967).
- RAMSEY, M. A., For Maximum Flexibility Control with Bypass, *Air Condit. Heat. Vent.*, **64**, (4), 75 (1967).
- RAMSEY, M. A., More Bypass Controls, *Air Condit. Heat. Vent.*, **64**, (6), 81 (1967).
- RAMSEY, M. A., Pay Attention to the Humidity Too, *Air Condit. Heat. Vent.*, **64**, (7), 49 (1967).
- RAMSEY, M. A., Coils and Controls for Close Humidity Tolerances, *Air Condit. Heat. Vent.*, **64**, (8), 79 (1967).

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#### REFERENCES

1. Anon (1965) *Energy*, Life Science Library.
2. Anon (1966) *Weather*, Life Science Library.
3. Anon (1932) *Zur 25-jährigen Bestehen 1906-31*, Verein Schweiz. Centralheizungs Industriellen, Zurich.
4. Billings, J. S. (1896) *Ventilation and Heating*, Engng. Record, London.
5. Carrier, W. H. and Busey, F. (1911) Air conditioning apparatus, *ASME Trans*, Paper No. 1341.
6. Debesson, G. (1908) *Le Chauffage des Habitations*, Dunod, Paris.
7. Dufton, A. F. (1940-41) Early applications of engineering to warming of buildings, *Trans. Newcomen Soc.*, 21, 99.
8. Dye, F. (1897) *Hot Water Supply*, Spon, London.
9. Eckmann, D. (1945) *Principles of Industrial Process Control*, Wiley.
10. Gartside, M. J. (1978) Private communication.
11. Hollman, W. (1965) Pneumatic control of heating and ventilation, *Klimatech.*, 7, (2), 8.
12. Honiball, C. (1907) Mechanical ventilation and warming of St. George's Hall, Liverpool, *Proc. IHVE*, 8, 153.
13. Jackson, S. B. (1946) Thermionic valve control of heating and ventilating installations, *JIHVE*, 14, 21.
14. Jackson, T. B. (1971) Theory and economics of optimum start programming of heat plant, *JIHVE*, 39, A24.
15. Knuth, C. (1907) Central heating and ventilating plant of Stock Exchange, Budapest, *Proc. IHVE*, 8, 81.
16. Mayr, O. (1976) Origins of feedback control, *Sci. American*, (Oct.).
17. Naylor, S. (1902) Low pressure steam heating, *Proc. IHVE*, 3, 97.
18. Picard, Ph. (1897) *Chauffage et Ventilation*, Baudry, Paris.
19. Ramsey, A. R. J. (1945) The thermostat or heat governor - an outline of its history, *Trans. Newcomen Soc.*, 25, 53.
20. Roberts, B. M. (1976) Electronic controls for heating and air conditioning, *Electrotech.* (Jan.).
21. Taylor, F. M. H. (1978) Private communication.
22. Tomlinson, C. (1850) *Rudimentary Treatise on Warming and Ventilation*, Weale, London.
23. Wildish, D. G. (1962) A controller for electric thermal storage systems, *H. V. Engr.* (Jan.), 367.

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